DOCUMENT RESUME

ED 022 264 EA 001 630

By-Berman, Louise M.; Usery, Mary Lou

PERSONALIZED SUPERVISION: SOURCE- AND INSIGHTS.

Association for Supervision and Curriculum Development, Washington, D.C.

Pub Date 66

Note-64p.

Available from-Association for Supervision and Curriculum Development, 1201 Sixteenth Street, N.W., Washington, D.C. 20036 ($1.75)

EDRS Price MF-$0.50 HC Not Available from EDRS.

Descriptors-*ADMINISTRATOR ROLE, CASE STUDIES (EDUCATION), CLASSROOM ENVIRONMENT, *INTERACTION PROCESS ANALYSIS, *SUPERVISORY METHODS, SUPERVISORY TRAINING, *TEACHER BEHAVIOR, *TEACHER SUPERVISION, VERBAL COMMUNICATION

This booklet suggests new methods to personalize supervision by giving teachers and supervisors more concrete techniques and information with which to develop their abilities. Examination of several teaching and supervisory studies provides insights into the supervisory role and teacher behavior. Four models for supervisory practice are suggested. (TT)

PROCESS WITH MICROFICHE AND PUBLISHER'S PRICES. MICROFICHE REPRODUCTION ONLY.

Personalized Supervision

sources & insights

ED0222
001 630

ASSOCIATION FOR SUPERVISION AND CURRICULUM DEVELOPMENT

Louise M. Berman and Mary Lou Usery

PROCESS WITH MICROFICHE AND
PUBLISHER'S PRICES. MICRO-
FICHE REPRODUCTION ONLY.

Personalized Supervision: sources & insights

Louise M. Berman
Professor of Education
University of Maryland, College Park

Mary Lou Usery
Doctoral Intern
College of Education
The Ohio State University, Columbus

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Association for Supervision and Curriculum Development, NEA
1201 Sixteenth Street, N.W., Washington, D.C. 20036

ED022264

Permission to reproduce this copyrighted work has been granted to the Educational Resources Information Center (ERIC) and to the organization operating under contract with the Office to Education to reproduce documents included in the ERIC system by means of microfiche only, but this right is not conferred to any users of the microfiche received from the ERIC Document Reproduction Service. Further reproduction of any part requires permission of the copyright owner.

Copyright © 1966 by the

Association for Supervision and Curriculum Development, NEA
1201 Sixteenth Street, N.W., Washington, D.C. 20036

Price: $1.75

Library of Congress Catalog Card Number: 66-20317

Contents

Foreword v

Preface vii

Part One Personalized Supervision: Insights from Research on Teaching 1

- Personalizing: Its Relationship to Supervision 1
- Supervision: Its Relationship to Teaching 2
- The Scientific Approach: Its Relationship to Personalized Supervision 3

Part Two Sources for Insights into Personalized Supervision 5

1. Predetermined Patterning of Teaching Behaviors: Pertinent Studies 7
   - Teaching as Interaction Analysis: A Review of Studies 7
     - Verbal Behavior as a Guide to Teacher Influence: The Flanders Study 8
     - Verbal Behavior as a Guide to Social-Emotional Climate: The Withall Study 10
     - Verbal and Nonverbal Behavior as a Guide to Measuring Changes in Student Teaching: The Hunter College Study 11
     - Verbal and Nonverbal Behavior as a Guide to Teacher Characteristics: The Ryans Study 13
     - Verbal and Nonverbal Behaviors and Their Functions: The Hughes Study 15
     - The Classification of Verbal Behavior Into Patterns of Teaching: The Smith and Meux Study 16
     - Verbal Behavior Patterns and Their Effect on Learning: The Bellack Studies 17
   - Counterparts in Supervision 18

Supervisory Applications of the Flanders Study 19
  - Using the Flanders Technique for Changing Behavior 19
  - Using the Flanders Matrix To Focus on the Act of Teaching 20
  - Developing New Leads for Supervision from the Flanders Study 21

Supervisory Applications of the Hughes Study 22
  - Using the Provo Code for Noting Behavioral Change 22
  - Developing New Leads for Supervision from the Hughes Study 23

Futher Supervisory Applications of the Studies on Teaching 24

2. Individual Patterning of Teaching Behaviors: Relevant Studies 25
  - Clinical Supervision: Personalizing the Process 25
  - Clinical Supervision in a Public School Setting 27
  - Fruitful Leads to Further Research 29

3. From Source to Insight: Unanswered Questions 30
  - Teaching as a Source for Deriving Further Supervisory Knowledge 30
  - The Preparation and Continuing Education of Supervisors 32
  - Group Versus Individual Supervision 34

Part Three Modes of Personalizing Supervision 36
  - Scientific Supervision 37
  - Nondirective Supervision 40
  - Multi-faceted Supervision 43
  - Person-to-Person Supervision 46

Selected Bibliography 51

Foreword

As indicated in its title, the Association for Supervision and Curriculum Development is *the* national professional organization for supervisors. The work of supervisors, the theory of supervision, and the improvement of the supervisory processes represent major areas of concern and interest in the program and activities of ASCD. Because of this interest and concern, our organization must continue to raise new questions, to synthesize old knowledge, to clarify the relationships among various fields of knowledge, and to plow ground which needs working in order to find solutions to significant problems in supervision. With fields of knowledge expanding very rapidly, supervision has many areas with which it must relate in looking for new insights.

Supervision goes beyond the title of an individual and includes the functions of all persons who are in some way responsible for helping teachers perceive their tasks more realistically, see themselves and their competencies in relation to their tasks, and regard themselves as professional persons capable of carrying through the tasks. If supervision is conceived in this way, its study should include the nature of person-to-person relationship; such is the focus of this booklet.

At a meeting of one of its working groups, during a recent ASCD national conference, the possibility of gaining new insights from the field of teaching was discussed. One of the writers of the booklet picked up the suggestion and with the help of the coauthor, through the use of an informal questionnaire, inquired among many ASCD members as to the relationship of current studies on teaching to supervisory practices. An initial report was prepared. The ideas seemed to have relevance for the wider ASCD audience and, therefore, the current booklet evolved.

One of the major tasks of supervision is the conducting of observations and the follow-up conference. This supervisory function is given central attention in this booklet. Despite the fact that persons charged with supervisory responsibility spend much of their time in this type of activity, little emphasis is given to this area in the preparation of supervisors. Our concern, therefore, is to help make this process as effective as possible.

Through applying some of the research techniques which have been used to help our understanding of the nature of the teaching act, persons engaged in supervision may gain some leads as to how to perfect their art as they seek to improve the instructional program. Obviously, both the fields of teaching and supervision require further intensive study. We do believe, however, that enough knowledge is now available for supervision to begin to take some long strides in making this one of the more advanced fields within the educational domain.

The Association acknowledges with sincere appreciation the personal and professional contribution of Louise M. Berman and Mary Lou Usery in the planning and writing of this booklet. Robert R. Leeper worked with the manuscript in its several stages and edited the material in its final form. Technical production of the booklet was handled by Mary Ann Lurch, Editorial Assistant, with the help of Teola Jones, Staff Assistant, and under the supervision of Ruth P. Ely, Editorial Associate, ASCD.

February 1966

GALEN SAYLOR, President
Association for Supervision
and Curriculum Development

Preface

Most educators are well-intentioned individuals anxious to make a difference in the lives of those persons with whom they work. Although techniques and methods may be open to question, teachers who lack conscientiousness are indeed an exception. Administrative and supervisory personnel often spend hours far beyond the call of duty in attempts to upgrade instruction. Yet questions related to *what* we are doing and *how* we are doing continue to haunt many dynamic persons involved in the educational enterprise.

Among the persons who are charged with making a difference in the lives of teachers and ultimately in the children whom these teachers serve are educators who perform supervisory functions. Such persons are often searching for sources and insights which will enable them to bring increased competence to their tasks.

One source of help for persons interested in breaking boundaries in the field of supervision is the group of recent studies on the nature of teaching. These studies focus upon the description of classroom operations, especially as these are reflected in the verbal behavior of teachers and young people. Whatever the limitations of these studies, they have shed new light upon teaching, since the descriptive material gives a clearer understanding of the present state of the art. Current work presents a more accurate picture of what *is*, rather than what *ought* to be, transpiring within the classroom.

Because of the trend toward increased precision in studies describing teaching, several educators have begun to examine supervision in light of some of the principles underlying these studies. Among the common factors which can be noted in the studies on teaching and supervision are the following: (a) Both tend to describe either the teaching or supervisory act in specific rather than general terms; and (b) both ordinarily describe rather than prescribe.

The trend toward increased use of the tools of the scientist in supervisory behavior may cause the field to move in either of two directions. Supervision may become unidimensional, with description of practice becoming the primary goal. Or, supervision may become multidimensional with description of practice coupled with other tools serving as the springboard for making supervision a highly personalized and hopefully powerful process.

One intent of this booklet, therefore, is to discuss a select, but representative, group of studies of teaching and supervision that provide insights into the description of teaching behavior with increased accuracy and precision. A second purpose is to raise questions which are stimulated by the research. A further purpose is to indicate potentialities in supervisory practice which are possible when precision of method coupled with expertise in human understanding permeates supervisory behavior.

The ideas contained in the pages which follow grew out of a recent preliminary study of the authors titled, "Has Recent Research on Teaching Influenced Supervisory Practices?" This study was written after an investigation of current supervisory practices which were related to recent research on teaching. In addition to a review of related and pertinent literature, a number of persons, known to have expressed interest in the field of supervision, were contacted in order to gain information related to the central question of the study. Without the cooperation of these persons, this booklet would probably not have been possible.

Other individuals and groups also supplied valuable help and encouragement during the writing of both the initial study and the booklet which was an outgrowth. The ASCD Publications Committee and Executive Committee raised questions and supplied the stimulation to carry the project through. To the University of Wisconsin—Milwaukee and to the ASCD editorial staff appreciation is due for secretarial and editorial help during the initial study and the booklet which emanated from it. Especially instrumental in bringing this publication to fruition was Robert R. Leeper, Associate Secretary and Editor, ASCD Publications. His interest in the central ideas of what is contained herein served as a goad when absence of the precious commodity of time seemed to deter progress in writing.

Can the tools of science help to personalize supervision? We believe they can. The chapters which follow suggest further avenues needing exploring as supervisors seek to make their intent congruent with practice.

LOUISE M. BERMAN
and
MARY LOU USERY

Part One

Personalized Supervision: Insights from Research on Teaching

Major changes in the thinking and feeling of an individual often come about through the impact of one person upon another. Although contacts between persons may be infrequent, the effects of such contacts should not be inconsequential, particularly within the educational enterprise.

Personalizing: Its Relationship to Supervision

Persons charged with supervisory responsibilities, such as curriculum coordinators, department chairmen, principals, assistant superintendents in charge of instruction, directors, and supervisors, have the task of making a difference often within a very brief period of time. To be the person who can make the most of each encounter with another individual is indeed a challenge to the educational leader. Such a challenge cannot be ignored, however, if teachers are to make the forward thrusts which distinguish superiority from mediocrity in teaching.

One way to make necessary differences in schooling for children and youth is through the personalizing of teacher-supervisor interchanges. By personalizing is meant the meeting of another at a level and through a means which is central to the concerns, interests, ideas, and modes of thinking and feeling of the other. Personalizing is responding at the level of personality where a strategic impact can be made. At times this meeting of teacher and supervisor may go beyond the traditional "helping" of the teacher to an interactive situation in which both supervisor and teacher are enhanced by the confrontation. As a result of such interaction the supervisor, as well as the teacher, views himself in new ways.

Although persons who perform supervisory functions have many and varied tasks, the central concern of this booklet is only with the observation and conference. By delimiting the discussion to these tasks of the supervisor, an attempt is made to bring into focus some of the infinite variety possible in personalizing supervision. Other equally important roles and functions are not treated, not because of their lack of importance, but because the observation and conference lend themselves particularly well to the personalizing aspects of supervisory practices. The reader, however, will see, at many points, the appropriateness of personalizing other supervisory responsibilities besides the two areas discussed.

Supervision: Its Relationship to Teaching

Supervision involves a transaction between two adult minds that culminates in new insights which have an effect upon children or youth. The effect may vary in its quality depending upon the goals inherent in the teaching situation and the type of response evoked from the supervisor-teacher interactive setting.

Supervision has many elements in common with teaching. Hence, insights from the one field can serve to perfect the state of the art in the other.

First, both teaching and supervision involve the act of mediation or intervention. One individual stands in the way of, hopefully in a positive sense, another's clarifying or going beyond his present knowledge. This coming-between can enable the individual to see his world more clearly, to find meaning in his experiences.

Second, both teaching and supervision can profit from studies which encourage increased skill and precision in observation. Focusing sharply upon what is seen and heard enables the observer to describe more accurately the phenomenon he is observing. Current studies on teaching have tended to establish procedures which enable the recording of what is being done and said. These data allow the teacher to make judgments about his teaching rather than to have another make judgments about him.

By viewing teaching through the eyes of a scientist interested in data gathering, the teacher can begin to ascertain whether outward behavior is synchronized with inward intent. By making his own judgments, the teacher moves toward increased autonomy, a necessary component of his professional equipment.

Even as studies of teaching are focusing upon description rather than upon prescription, upon the *is* rather than the *ought,* so studies on supervision might be formulated in a similar manner. Designs which facilitate the supervisor's seeing and coming to a better understanding of his own behavior might provide an avenue for further refinement of the art of supervision. Such designs might incorporate many of the strands which are inherent in much of the current research on teaching.

Third, as descriptive studies of teaching and supervision become increasingly sophisticated in purpose, design and outcomes, prescriptive studies of what needs to be changed or emphasized can be made with greater assurance. Present studies tend to rule out many variables because of the subjectivity involved in data gathering. Yet, in studies of both teaching and supervision, interim means need to be devised to include data which are not easily categorized or quantified. We dare not overlook the potential impact of the well-turned phrase, the thoughtful act, or the meaningful gesture.

The Scientific Approach: Its Relationship to Personalized Supervision

Many areas of knowledge could have relevance for personalized supervision, but the reader is asked to forgive the heavy emphasis upon studies of teaching and supervision which serve as foundational material for the alternative ways of personalizing supervision described in the final chapter. In the section which follows, two modes of describing teaching are discussed. The first deals with studies in which the categories for viewing teaching have been determined prior to the classroom observation. The supervisor seeks to look at teaching within a framework already developed by someone other than the teacher being observed. The second mode of viewing teaching, although again focusing upon observable behavior, seeks to derive categories and patterns from within the context of what is being observed. The supervisor selects, from what he sees in the classroom, examples of outward behavior which he formulates into a design for discussion purposes with the teacher. Both types of studies tend toward the precision of the scientist.

This booklet is written not so much to answer as to ask. Increased understandings usually open up more fields than they close. New knowledge in the field of supervision has been evoked and continues to be provoked by certain of the rather precise studies which encourage a more descriptive analysis of the teaching act.

Knowledge of supervision and teaching begs further inquiry. Nonetheless, the searches of the past few years have taken us far. Coupled with increased individual humanness, understanding and wisdom, the supervisor can begin to take giant steps in enhancing his own effectiveness and performance.

The next section briefly treats knowledge about teaching having relevance for personalizing supervision. What is the meaning of this knowledge? The final section suggests some alternative answers.

Part Two

Sources for Insights into Personalized Supervision

How man patterns, classifies and organizes has long been of interest to students of human behavior. At times, man's experiencing calls for the categorizing of discrete ideas and concepts into frameworks or orders which are external to or outside the individual. At other times, the demands of existence necessitate the development of personal frameworks which enable the individual to see his universe or part of it in ways that have meaning primarily for himself. If persons are to cope with the exigencies of living, they should possess the dual competencies of categorizing into predetermined frameworks and of developing personalized frameworks significant to the individual.

As fields of knowledge develop, scholars are often perplexed by the relationship of personal to public knowledge. If scholars are encouraged to view knowledge in highly personalized ways so that common frameworks are not apt to emerge, the field of study stands to lose because of inadequate means of linking with and building upon previously discovered knowledge. If the emphasis is too heavy upon the creation of an established body of knowledge, then the unusual insights that do not fit into preestablished structures are apt to be lost. Public frameworks enable the building of a body of knowledge. Private structures enable individuals to live more adequately because they can make sense from discrete events.

If the above ideas are applied to teaching, two approaches to the improvement of knowledge within the field may be noted. On the one hand, the current emphasis upon scientism has prompted attention to appropriate ways for systematizing knowledge into predetermined categories. On the other hand, existentialist thinking has caused a trend toward the personalizing of frameworks. These two viewpoints toward systematizing and classifying teaching behaviors are not mutually exclusive. One sheds light upon the other.

In Part Two, therefore, attention is first directed toward one source for the improvement of teaching, the study of teaching through the gathering of data within predetermined frameworks. Attention is also given to attempts made to use these predetermined frameworks within the supervisory situation. Representative studies which deal with teaching primarily through predetermined frameworks are discussed. In these studies the frameworks and means for categorizing within them are determined by sources outside the individual.

A few examples are then summarized in which the individual supervisor assumes the initiative in determining the order, categories and priorities of observable teaching behavior. Supervisory behavior becomes highly personalized in terms of the supervisor's perceptions of what is happening within the classroom setting. Nonetheless, the emphasis upon observable rather than inferred behavior tends to place these examples within the realm of the scientific.

Since viewing teaching within either predetermined or open frameworks bears further exploration, the last section of this part treats a few of the questions which are raised by the work reported in the first two sections of Part Two. In brief, "Sources for Insights into Personalized Supervision" contains a review of significant studies of teaching and supervision in which more precise techniques are seen as critical to personalizing supervision.

1. Predetermined Patterning of Teaching Behaviors: Pertinent Studies

During recent years investigators have been turning to descriptions of teaching with a view to finding out what actually takes place in classrooms. In the attempt to be objective, the investigators have utilized tools which have promoted critical analysis. The desired precision of recent studies on teaching is reflected in the type of *instrumentation,* the allocation of *time,* training of *personnel,* quantification of *data,* prescription of *techniques,* and limitation of *focus.* To illustrate how careful and precise description is keynoted, these items are briefly developed.

Teaching as Interaction Analysis: A Review of Studies

Instruments are designed that classify teaching behaviors within predetermined patterns. *Time* allotments are determined for length of observations and for subsequent occurrences of observations. *Personnel* are specially prepared for using the data gathering instruments which are precise and leave only marginal room for error when used by the well-trained observer. *Data* are gathered from large numbers of teachers through numerous observations. Because of the quantity of data collected, statistically significant conclusions are possible. *Techniques* involve carefully constructed observational procedures and reliable methods of analyzing data. *Foci* of the studies are limited to variables that are easily described.

Resulting from this research is a group of studies that move toward increased precision, thus enabling new insights into the science of teaching. Though the question, "What is teaching?" can still be answered only in part, the studies on teaching provide one objective answer based on the findings of descriptive research.

Studies that seem most pertinent to a consideration of supervision are those that deal with interaction. Defined broadly, *classroom interaction* includes the use of gestures, glances, signs and symbols. As used generally by those who attempt to describe teaching, classroom interaction is primarily concerned with the verbal as opposed to the nonverbal behaviors of teachers and students. Verbal behavior is observed and classified according to predetermined categories. To illustrate, some categories are based on functions that the verbal behavior elicits from the student; other categories are based on the conditions the verbal behavior establishes in terms of social-emotional climate. Nonverbal behavior is noted and categorized into behavior patterns. In the research studies on classroom interaction, more of the studies have dealt with verbal than with nonverbal behaviors.

Brief summaries of several basic studies concerned with teacher-pupil interaction are included in this section. Each review briefly discusses the purpose, procedures, results and implications derived from the research. Examples of pertinent categories are cited to point out certain diverse elements within the various studies. Included are illustrations such as the rules of Bellack's "classroom game" and the "patterns of teacher behavior" from Ryans' study.

Verbal Behavior as a Guide to Teacher Influence: The Flanders Study[1]

A study dealing with pupil-teacher classroom interaction analysis was undertaken by Flanders, who dealt with the influence of the teacher's verbal behavior in the classroom.[2] Flanders developed a list of ten types of verbal behavior into which statements made in the classroom were categorized. Teacher statements were classified into seven categories and pupil responses into two. A tenth category took in types of verbal behavior that were unclassifiable from the standpoint of the initiator of the action. To gather the data, a trained observer classified verbal behavior of the teacher or pupil into one of the ten categories every three seconds. The ten categories used during interaction analysis were the following:

1. *Accepts Feeling:* accepts and clarifies the feeling tone of the students in a nonthreatening manner. Feelings may be positive or negative. Predicting or recalling feelings are included.
2. *Praises or Encourages:* praises or encourages student action or behavior. Jokes that release tension, not at the expense of another individual, nodding head or saying, "um hm?" or "go on" are included.
3. *Accepts or Uses Ideas of Student:* clarifying, building, or developing ideas suggested by a student. As teacher brings more of his own ideas into play, shift to Category 5.

---

[1] Ned A. Flanders. *Teacher Influence, Pupil Attitudes, and Achievement: Studies in Interaction Analysis.* Minneapolis: University of Minnesota, U.S. Office of Education Cooperative Research Project No. 397, 1960. (Mimeographed.)

[2] The term *interaction analysis* was coined by Flanders and refers to a specific technique which he devised for noting verbal behaviors. In other parts of this paper, the term is used more broadly to include the analysis of nonverbal as well as verbal behaviors in the classroom.

4. *Asks Questions:* asking a question about content or procedure with the intent that a student answer.

5. *Lecturing:* giving facts or opinions about content or procedure; expressing his own ideas, asking rhetorical questions.

6. *Giving Directions:* directions, commands, or orders with which a student is expected to comply.

7. *Criticizing or Justifying Authority:* statements intended to change student behavior from nonacceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing; extreme self-reference.

8. *Student Talk—Response:* talk by students in response to teacher. Teacher initiates the contact or solicits student statement.

9. *Student Talk—Initiation:* talk by students which they initiate. If "calling on" student is only to indicate who may talk next, observer must decide whether student wanted to talk. If he did, use this category.

10. *Silence or Confusion:* pauses, short periods of silence, and periods of confusion in which communication cannot be understood by the observer.[3]

Over a period of six years, observations were made of over one hundred teachers from all grade levels in six different school systems. When the data were gathered, the observer tabulated each pair of events in sequence into a matrix. The recording of the sequential pairs informed the interpreter about which behavior preceded or followed other behaviors. Many trends or influences of behaviors in the classroom were noted by means of the matrix.

A number of research projects were based on the use of interaction analysis. Some of the results reported from the various studies were:

1. . . . there were consistent differences in the pattern of teacher statements when classrooms in which the students had more constructive attitudes were compared with classrooms in which the attitudes were less constructive.

2. . . . attitudes of students toward the teacher and class were significantly more constructive in classrooms in which achievement was higher. The verbal patterns of teachers in the superior classrooms were significantly different from those in the below average classrooms.

3. Participation in a ten week course (in-service training program) produced significant changes in the spontaneous verbal patterns of teachers. The use of interaction analysis as a method of feedback . . . for teachers showed considerable promise.[4]

Conclusions from the research show that an estimated two-thirds of the time in an average classroom is spent in talking. Two-thirds of the talking is done by the teacher. Two-thirds of his verbalizations are opinionated, directional, or critical. The percentages decrease in superior classrooms and increase in below average classrooms. A variety of factors such as grade level and subject matter affect the teacher's verbal behavior patterns.[5]

---

[3] Donald M. Medley and Harold E. Mitzel. "Measuring Classroom Behavior by Systematic Observation." *Handbook of Research on Teaching.* N. L. Gage, editor. Chicago: Rand McNally & Co., 1963, p. 272. Citing Flanders, *op. cit.*, Appendix F, p. 5.

[4] Ned Flanders. "Analyzing Teacher Behavior." *Educational Leadership* 19:174-75; December 1961.

Implications from the research suggest lines of further study concerning teacher-pupil interaction. The use of praise—its timing and its use of criteria—needs further investigation. The different ways in which teacher-pupil planning was conducted in superior and below average classrooms also suggested fruitful leads to further study of teaching methodology.[6]

Verbal Behavior as a Guide to Social-Emotional Climate: The Withall Study[7]

Withall attempted to develop a technique to measure social-emotional climate in the classroom through a categorization of teacher statements. He tape-recorded 117 teachers' responses, analyzing the teachers' verbal behaviors from the tape recordings to find whether the teacher was using verbal behaviors that would be conducive to learning. Certain conditions had been predetermined to describe a social-emotional climate that was conducive to learning. Inherent among these conditions were experiences that were "meaningful to the learner" and experiences that "occur in a non-threatening situation."[8]

When the data were analyzed, the verbal statements of the teacher were classified into seven categories:

1. Learner-supportive statements that have the intent of reassuring or commending the pupil.

2. Acceptant and clarifying statements having an intent to convey to the pupil the feeling that he was understood and help him elucidate his ideas and feelings.

3. Problem-structuring statements or questions which proffer information or raise questions about the problem in an objective manner with intent to facilitate the learner's problem solving.

4. Neutral statements which comprise polite formalities, administrative

---

[5] *Ibid.*, p. 178-79.

[6] *Ibid.*, p. 179-80.

[7] John Withall. "The Development of a Technique for the Measurement of Social-Emotional Climate in Classrooms." *Journal of Experimental Education* 17: 347-61; March 1949.

[8] *Ibid.*, p. 347.

comments, verbatim repetition of something that has already been said. No intent inferrable.

5. Directive or hortative statements with intent to have pupil follow a recommended course of action.

6. Reproving or deprecating remarks intended to deter pupil from continued indulgence in present "unacceptable" behavior.

7. Teacher self-supporting remarks intended to sustain or justify the teacher's position or course of action.[9]

Using these categories as an index, Withall noted that when a proportionately greater number of items fell into categories 1, 2, and 3, the climate was designated as "learner-centered." When more items fell into category 3, the climate was designated as "problem-centered." When more items fell into categories 5, 6, and 7, the climate was designated as "teacher-centered."[10]

Resulting from the study was a validation of Withall's technique to describe and distinguish the social-emotional climate of the classroom by analyzing teachers' verbal statements and identifying the patterns in relation to a climate index.

Implications from the study raised questions about (a) the relationships between social-emotional climate and the quality of teaching, (b) the use of a climate index for self-analysis of teaching, (c) the use of the climate index for direct rather than recorded observations of verbal behavior.[11]

Verbal and Nonverbal Behavior as a Guide to Measuring Changes in Student Teaching: The Hunter College Study[12]

The Hunter College project was undertaken to determine whether the use of closed circuit television during supervision of student teachers would improve the effectiveness of the student teacher's classroom behavior.[13]

For this project classrooms at the Hunter College Elementary School were equipped with closed circuit television systems. Fifty-four student teachers participated in the study with three students teaching the same group in each classroom. The three student teachers were observed by the same supervisor who used three different types of supervision: observation within the classroom; observation entirely by television; and a combination of both methods. Four kinescopes were made of each student teacher. Lessons were filmed that were later viewed by trained observers who recorded the teaching behaviors.

---

[9] *Ibid.*, p. 349.

[10] *Ibid.*

[11] *Ibid.*, p. 360

[12] Herbert Schueler, Milton J. Gold and Harold E. Mitzel. *The Use of Television for Improving Teacher Training and for Improving Measures of Student-Teaching Performance, Phase I. Improvement of Student Teaching.* New York: Hunter College, The City University of New York, 1962.

[13] Donald M. Medley. "Measuring Changes in Student Teacher Behavior: A Second Look." Paper read at the annual meeting of the Association for Student Teaching in Chicago, Illinois, on February 20, 1964. p. 1.

To measure the teaching behavior objectively, the "Observation Schedule and Record (OScAR)" was constructed. It is this instrument and its use that has relation to the group of studies on teaching. The OScAR was a list of about 170 specific teaching behaviors. The three major categories of the OScAR included verbal behaviors, behaviors associated with the management of the classroom and its social-emotional climate, and behaviors associated with processes that spur children's thinking. Behaviors observed during each three minute section of the twenty-four minute kinescope were recorded. When the data were analyzed, eight major factors emerged.

The Eight Factor Dimensions Scored on OScAR 3d, e, f

	Non-affective Climate
Teacher Role:	
Presence:	Teacher keeps good order in his class, is rated high on use of voice and of movement and gestures, uses the blackboard effectively; his verbal behavior is high in clarification and neutral rejection of pupil responses.
Teaching Style:	
Informative:	Teacher introduces lesson with statement of objectives and relates it to pupil needs and past learnings; his verbal behavior is high on information-giving statements.
Imaginative:	Teacher makes provision for individual differences; uses examples, methods, techniques that are apt, creative, and arouse high pupil interest.
Pupil Role:	
Activity:	Both the teacher and the pupil are highly active, asking and answering questions of all types.
Initiative:	Pupils are encouraged to respond in various ways; the structure of the lesson is not rigid; the teacher sometimes has difficulty in getting the attention of the class.

Affective Climate

Consideration:	Teacher asks more affective-imaginative questions and makes more encouraging statements than average; is courteous and shows awareness of pupil needs, interests, or difficulties. Pupil interest is rated high.
Response:	
Warmth:	Teacher supports or praises pupils, avoids neutral acceptance and reproves gently if at all. He often reads questions from a book or the chalkboard and directs pupil activities more than the average teacher.
Disapproval:	Teacher reproves pupils and criticizes their responses; his speech pattern is likely to be below average, and he often terminates a lesson abruptly.[14]

For the purposes of this booklet, perhaps the most pertinent conclusion is that measures of classroom behavior can be achieved from objective records. The validity of the measures does not rest upon the professional judgment or experience of the observer.[15]

Implications from the study suggest that the use of an observation schedule by a supervisor during classroom visitations will help the supervisor achieve his purpose. An objective record that can be used during conferences with teachers and on successive occasions for making comparisons should provide a sound basis on which to develop more effective teaching methods.[16]

Verbal and Nonverbal Behavior as a Guide to Teacher Characteristics: The Ryans Study[17]

The Teacher Characteristics Study directed by Ryans was an eight year research project conducted during the 1950's. In this study approximately one hundred research projects were undertaken with the participation of several thousand teachers. The major objectives were:

> 1. The identification and analysis of some of the patterns of classroom behavior, attitudes, viewpoints, and intellectual and emotional qualities which may characterize teachers....
>
> 2. The development of paper-and-pencil instruments suitable for the esti-

---

[14] Donald M. Medley. "Experiences with the OScAR Technique." *Journal of Teacher Education* 14: 270; September 1963.

[15] *Ibid.*, p. 272.

[16] *Ibid.*, p. 273.

[17] David G. Ryans. *Characteristics of Teachers: Their Description, Comparison, and Appraisal.* Washington, D.C.: American Council on Education, 1960.

mation of certain patterns of classroom behavior and personal qualities of teachers. . . .

3. The comparison of characteristics of various groups of teachers.[18]

To gather the data, a form was developed that could be used for assessing behaviors following direct classroom observations. This form, the "Classroom Observation Record," listed twenty-five dimensions of behavior, each of which could be rated on a seven point scale. Though some exceptions were made in the number and length of observations, generally each teacher in the sampling was observed on two forty-five minute occasions, each time by a different observer. The observers, who were carefully trained in the procedures, estimated the teacher's behaviors that had been noted during the observation and made an assessment of each of the dimensions that were observable. The assessments were made on the Classroom Observation Record immediately following the observation.

Many patterns of teacher behavior were analyzable through the data. Three behavior patterns that were particularly outstanding for both elementary and secondary teachers were:

TCS Pattern X_0-. . . understanding, friendliness, and responsiveness *vs.* aloofness and egocentrism on the part of the teacher;

TCS Pattern Y_0-. . . responsible, businesslike, systematic *vs.* evading, unplanned, slipshod teacher behavior;

TCS Pattern Z_0-. . . stimulating, imaginative, original *vs.* dull, routine teacher behavior.[19]

Other areas of teacher behavior were analyzed, including "teachers' attitudes, educational viewpoints, verbal understanding, and emotional adjustment." [20] A number of trends were reported.

The use of correlates to predict teachers' behavior and characteristic traits was studied extensively. Several instruments were developed that could be used for estimating teacher characteristics. These instruments were compiled into a single grouping, the "Teacher Characteristics Schedule," and scoring keys were developed from the Schedule.[21]

Comparisons were made of the characteristics of teachers in relation to numerous factors such as age, teaching experience, sex, marital status, academic success, size of school, size and socioeconomic status of the community, and geographic area.[22] In the various dimensions of analysis,

[18] *Ibid.*, p. 9-10.

[19] *Ibid.*, p. 102.

[20] *Ibid.*, p. 137.

[21] *Ibid.*, p. 159.

[22] *Ibid.*, Chapter 7.

significant differences could be noted in relation to scores on the Teacher Characteristics Study.

Implications from the research suggest that the Teacher Characteristics Schedule might be used for determining the merits and appropriateness of preservice course work as well as the in-service factors that affect teacher behavior.

Verbal and Nonverbal Behaviors and Their Functions: The Hughes Study[23]

Hughes and her associates set out to describe the teacher's verbal and nonverbal behavior, according to how that behavior was used for the pupils.

Forty-one elementary teachers were observed on three occasions, each for a period of thirty minutes. On each occasion two trained observers recorded verbatim the teacher's behaviors in shorthand and later compared their observations. The records of verbal as well as nonverbal behaviors were analyzed in terms of teaching acts. These acts were then classified into seven major categories of teaching behavior. The data indicated that, of the seven types of teaching behaviors, "controlling functions" made up the teaching behavior most frequently used by teachers to a far greater degree than any of the other teaching acts.

Implications from the study indicated that different patterns of teaching affect children's learning. One hypothesis concerning teaching patterns was that the following combination of the seven areas of behavior would result in "the optimum interaction pattern for learning in the elementary school":

Controlling Functions	20-40 percent
Imposition	1- 3 percent
Facilitating	5-15 percent
Content Development	20-40 percent
Personal Response	8-20 percent
Positive Affectivity	10-20 percent
Negative Affectivity	3-10 percent.[24]

A suggestion from the study was that the number of the teachers' controlling actions could be reduced. One means of changing controlling behavior could be accomplished by changes in the types of questions that the teacher asked. The suggestion was also made that greater "responsiveness" on the part of the teacher to the children's statements would lead to more effective classroom experiences for children.[25]

---

[23] Marie M. Hughes *et al. The Assessment of the Quality of Teaching: A Research Report*. Salt Lake City: University of Utah, U.S. Office of Education Cooperative Research Project No. 353, 1959.

[24] Medley and Mitzel. "Measuring Classroom Behavior by Systematic Observation," *op. cit.*, p. 271.

The Classification of Verbal Behavior Into Patterns of Teaching: The Smith and Meux Study[26]

Smith and Meux reported that their study was undertaken to establish a means of separating verbal teaching behavior into "units" that had significance for teaching and to analyze logically the units that evolved.[27]

Tape recordings were made of verbal behavior in seventeen high school classrooms. Five consecutive class periods were taped in each classroom. The verbal behavior as recorded on the tapes was analyzed into units of one speaker and two or more speakers. The units were classified into the categories of "logical operations" which were defined as "the forms which verbal behavior takes as the teacher shapes the subject matter in the course of instruction.[28] The categories of the logical operations were "Defining, Describing, Designating, Stating, Reporting, Substituting, Evaluating, Opining, Classifying, Comparing and Contrasting, Conditional Inferring, Explaining, and Directing and Managing Classroom."[29]

The investigators sought to find the "structure" of each logical operation and the "rules" by which that category was organized. Relationships among the categories were noted. Models of the logical structures were developed when possible. Comparisons were made between the individual units and the model.[30]

In their implications, the investigators emphasized that when educators looked at actual instructional operations, they would find them different from what they might have thought them to be verbally. Smith wrote that the "language of didactics" was too binding—that educators needed to look beyond pedagogical methods to find what actually happened. He suggested that in doing so, educators would find what "sorts of positions teachers assume" and "what maneuvers and detailed actions they take under varying circumstances and with different sorts of materials."[31] Such analyses as these would result in more precise descriptions of teaching.

---

[25] Marie M. Hughes. "What Is Teaching? One Viewpoint." *Educational Leadership* 19: 258-59; January 1962.

[26] B. Othanel Smith and Milton O. Meux. *A Study of the Logic of Teaching.* Urbana, Illinois: University of Illinois, U.S. Office of Education Cooperative Research Project No. 258 (7257). (No date given.)

[27] *Ibid.,* p. 8.

[28] *Ibid.,* p. 3.

[29] *Ibid.,* p. 36-42.

[30] *Ibid.,* p. 57-64.

Verbal Behavior Patterns and Their Effect on Learning: The Bellack Studies[32]

Another aspect of interaction was viewed by Bellack. In his projects he proposed "to study the teaching process through analysis of the linguistic behavior of teachers and students in the classroom."[33] The aim was to describe patterns of linguistic behavior of teachers and pupils in classroom discourse and also to study linguistic variables of discourse in relation to pupil learning and attitude change.

The subjects of the study were 15 high school teachers and 345 students in social studies classes studying an economics unit on "International Trade." Tape recordings and verbatim transcriptions of four class lessons for each of the fifteen classes supplied the basic data for the study.[34]

As they sought the meaning of the communications between teacher and pupils in the classroom, the investigators were concerned with "*what* the speaker was saying [*i.e.*, the content], what he was doing *pedagogically* in saying it, and the *feeling tone* communicated by the way he said it."[35]

When the verbatim transcriptions were analyzed, the basic verbal patterns tended to be grouped into four categories: structuring, soliciting, responding, and reacting. The first two categories were considered initiating activities while the latter two categories were considered reflexive activities. The verbal actions seemed to occur in patterns or combinations which the investigators termed "teaching cycles."[36]

Bellack and his colleagues analyzed the data in terms of the "classroom game" that concerned the linguistic activities carried on by the teacher and the pupils. The purpose of the game was to carry on linguistic discourse about subject matter that would result in learning achieved by the pupils.[37] Specific rules for the teacher and the pupils, as well as general rules for all players were developed. The investigators were careful to point out that these rules *described* the status of classroom discourse, rather than *prescribed* it.[38] In summary form, the rules for the teacher were:

---

[31] B. Othanel Smith. "A Concept of Teaching." *Teachers College Record* 61: 241; February 1960.

[32] Arno A. Bellack and Joel Davitz *et al. The Language of the Classroom.* New York: Teachers College, Columbia University, U.S. Office of Education Cooperative Research Project No. 1497, 1963; Arno A. Bellack *et al. The Language of the Classroom, Part Two.* New York: Institute of Psychological Research, Teachers College, Columbia University, U.S. Office of Education Cooperative Research Project No. 2023, 1965.

[33] Bellack and Davitz *et al., op. cit.,* p. 1.

[34] *Ibid.*

[35] *Ibid.,* p. 4.

[36] *Ibid.,* p. 6-9.

1. He is the most active single person playing the game. He makes the most moves, speaking most frequently and for the longest duration of time.
2. He sets up the structure for the form and content of the game.
3. His most frequent move is that of "soliciting," that is, making a directive move designed to get responses from other players.
4. He expects a response from the other player after each "soliciting" move. He reacts to each response, trying to do so positively. If a negative response is necessary he qualifies this response.
5. He summarizes most of the discourse.
6. He spends much of his time making moves that are reactive to the statements of the previous player.[39]

The investigators noted that the basic type of verbal behavior used in the classroom was that of the teacher's asking for information, the pupils' answer to the teacher's query, and the teacher's action following the pupils' reply.[40] The implications of the study suggested further research in these areas: (a) descriptions of classroom behavior through the proposition-result type of research, (b) the analysis of patterns of teaching, (c) the extension of the study into other grades, and (d) the study of affective influences on language.[41]

Counterparts in Supervision

Growing out of these studies on teaching are several studies that concern supervision. In many instances, the supervisory applications of the studies are being made by the investigators who conducted the original studies on teaching. In addition to the original investigators' expansion of their work, certain of their colleagues are pursuing the ideas of some of the original studies.

In many cases, perhaps the most important contributions to supervision from the studies on teaching are the frameworks that were used as instruments for viewing teaching. The use of such instruments offers the supervisor and teacher a chance to obtain an objective picture of the teacher's behavior.

---

[37] *Ibid.*, p. 146.
[38] *Ibid.*, p. 158.
[39] *Ibid.*, p. 147-50.
[40] *Ibid.*, p. 158.
[41] *Ibid.*, p. 162-65.

Supervisory Applications of the Flanders Study

Flanders' interaction analysis matrix is used in some supervisory practices. The matrix, which is used following the tabulation of the observed pupil-teacher interaction into ten categories, suggests trends of teaching behavior in classrooms.

Using the Flanders Technique for Changing Behavior[42]

Thirty *persons,* holders of liberal arts degrees, are teaching interns in a fifth year program. They assume major teaching responsibilities in a large city school system while pursuing education courses in a university program especially designed for them.

The *purpose* of the study is to assess how the teaching behavior of interns is affected by learning and using the Flanders technique of interaction analysis. The study is based on the hypotheses that interns who learn and use the Flanders technique for interaction analysis will become more indirect in their verbal classroom behavior and will change their perceptions of teaching problems and their verbal behavior in the classroom.[43]

The *procedures* of the study include the use of the Flanders technique of interaction analysis while observing the teaching behavior of the experimental group of fifteen intern teachers. The coordinating teachers, who are released from classroom responsibility to work with interns, are taught the Flanders technique of interaction analysis in an eight week workshop. As the coordinating teachers work with each of the two interns assigned to them, they observe the interns, using the interaction analysis technique. The coordinating teachers also do demonstration teaching, allowing the interns to make observations using the same technique. Information from the interaction analysis is used during follow-up conferences.[44]

Two other uses of Flanders' technique are included in the study. Interns make tape recordings of their own teaching and use the interaction analysis for self-evaluation. Supervisors working with the interns analyze teacher-pupil interaction during their observations and use the information during follow-up conferences.[45]

The *products* of the study are not yet available.

---

[42] Leonore W. Dickmann. "Education of Intern Teachers: An Experiment with Ned Flanders' Interaction Analysis Technique and Projection of Research." Madison, Wisconsin: School of Education, University of Wisconsin. U.S. Office of Education Small Contract Project Proposal, 1964. (Mimeographed.) This study is in process at the time of writing.

[43] *Ibid.,* p. 5.

[44] *Ibid.,* p. 6.

[45] *Ibid.*

Using the Flanders Matrix To Focus on the Act of Teaching[46]

The *persons* involved in this two year study were twenty educators, primarily teachers, participating in a public school in-service program involving group supervision and the use of Flanders' matrix.

The *purpose* of the study was to train teachers in the use of Flanders' matrix so that they would gain enlightened perceptions of their own teaching. In this program, emphasis was given to the act of teaching rather than to the teacher himself.

The *procedures* began with a training program during which the teachers were helped to interpret matrices for use with their own lessons. At the same time the teachers became familiar with the categories, practiced making notations while listening to tapes, constructed matrices, and discussed interpretation of the matrices.[47]

Other procedures included tape recording of individual lessons and analyses of the lessons through the use of Flanders' matrix, group feedback, and individual analysis of a teacher's own lesson.

Two types of supervision within groups were apparent in this study. *Supervision in a group setting* is the study by the group of a problem that is shared by all members of the group. This took place when matrix patterns that were common to the particular teachers were discussed. Suggestions for improving the activity of teacher-pupil dialogue were given by members of the group. *Group supervision* is the study and analysis by individual teachers of problems that are unique to their particular situation. This study is done within a group. The teachers listen to tapes, offering comments only when they think that change could take place and foregoing any interpretation of the taped discourses. A matrix was developed at the conclusion of each taped lesson along with group feedback. The teacher was then asked to analyze his own teaching.[48]

The *products* of this study of group supervision were described in terms of *organization, the role of supervisor, techniques,* and *findings.* These areas are discussed in the following paragraphs:

The *organization* of the groups that participated in this study varied in size, composition, commitment, and session length. A workable group size was between five and twelve members, depending on the amount of time that could be spent on the program. Groups composed primarily of teachers were more desirable than groups with many status persons. Personal commitment was the decision of each group member. To encourage individual responsibility, members were allowed to enter or leave the group as they wished. A one hour session with a small group at the conclusion of a teaching day was a suitable working time.[49]

---

[46] E. J. Amidon, K. M. Kies and A. T. Palisi. "A Fresh Look at Supervision." (No source of information given.) (Dittoed.) Included with response to survey by Edmund J. Amidon, Temple University, Philadelphia, Pennsylvania.

[47] *Ibid.*, p. 5.

[48] *Ibid.*, p. 6-7.

The *role of the supervisor* was relatively nondirective during group supervision. The setting was arranged so that the teacher could analyze his behavior to find areas that needed improvement and then could develop strategies for altering the behavior. The supervisor was supportive and accepting. His questions were open-ended and designed to elicit discussion rather than specific answers. The supervisor's suggestions were offered freely with no demands for acceptance.[50]

A number of *techniques* were noted for use during group supervision. These are described below:

- *Interaction analysis* is used by teachers to analyze tape recordings of their verbal interaction with pupils during teaching.
- *Role playing* gives teachers opportunities to produce certain specific kinds of teaching behavior or to explore a variety of behaviors.
- *Listening to tapes* of their own and other persons' verbal behavior is a useful means for teachers to analyze teaching styles.
- *Developing hypotheses* for new types of behavior often initiates self-directed attempts to make changes in behavior.
- *Experimenting with teaching behavior* is a forerunner of creative teaching and builds an attitude conducive to experimentation.[51]

The *findings* generally support the assumption that group supervision is appropriate in cases in which confidentiality of the teacher-supervisor relation is not required. The teachers had a greater awareness and response to verbal interaction during group supervision. The effects of group supervision seemed to "influence positively faculty interpersonal relationships, communications, goal-setting, and behavioral norms."[52]

Developing New Leads for Supervision from the Flanders Study[53]

Flanders continues to do research on teaching by using his interaction analysis technique. A recent project centers around developing a portable matrix tabulator which can be used by a supervisor to record interaction analysis data directly into a matrix. Resource materials are being developed to train people in the techniques of interaction analysis. A variety of materials have already been constructed, including filmstrips, various types of recordings, and a sequence of three episodes for which there is a complete typescript and tabulated matrix.

---

[49] *Ibid.*, p. 8-9, 11.

[50] *Ibid.*, p. 12.

[51] *Ibid.*, p. 12-15.

[52] *Ibid.*, p. 15.

[53] Ned A. Flanders. Ann Arbor, Michigan: University of Michigan. Response to a survey.

Supervisory Applications of the Hughes Study

The study by Hughes and her associates grew out of a consideration for using a merit salary increase program.[54] In order to find a means for assessing quality teaching, an instrument or guide to the assessment was needed. The Hughes study began as a means for designating quality teaching and the "Provo Code," the list of the teaching behaviors, resulted from the investigation.

Using the Provo Code for Noting Behavioral Change[55]

The *persons* involved in this project were teachers from two Provo, Utah, elementary school faculties. These teachers studied the code with a committee during times when they were released from their classrooms for this activity.

The *purpose* of the study was to experiment with the Provo Code to see if it could be used to improve teaching. The code had earlier been used to identify differences in classroom interactions that would characterize differences in the quality of teaching. This study was concerned with the teacher's ability to learn the code to the extent that it could be used as a guide to improve teaching.

The *procedures* involved having each teacher who participated agree to have two records made of his teaching, one in the autumn and one in the spring. The two records of teaching were categorized according to the code in order to determine differences in teaching behavior that might have occurred as a result of this study.

The *products* concerned the changes in behavior noted as outcomes of the study, implications regarding the use of the Provo Code, and suggestions for refining the code. Findings from the study indicated that the two records differed chiefly in "the decrease from autumn to spring in the number and percent of major functions that were categorized as controlling and the increase in development of content and positive affectivity."[56] The teachers agreed that their opportunity to study and discuss the use of the code contributed toward improvement in their teaching.

---

[54] Hughes *et al. The Assessment of the Quality of Teaching: A Research Report, op. cit.*

[55] John Clifton Moffitt. *In-service Education for Teachers.* Washington, D.C.: The Center for Applied Research in Education, Inc., 1963. p. 91-103.

[56] *Ibid.*, p. 99.

The use of the Provo Code indicated that it had potential for improving teaching. The study done in the Provo schools demonstrated the code's value as an instrument for in-service education, as a device that could be used at any grade level, and as a means for helping teachers independently develop more refined perceptions of teaching.

A suggestion that grew out of the Provo study was that an instrument (perhaps the code) might be written describing excellent teaching behaviors. With this instrument, supervisors could give teachers a view of superior teaching toward which they could try to develop their own teaching behavior. Such an instrument would not be designed as an absolute, unchanging goal, uniform for all teachers, but as a view of teaching that would give "an over-all pattern of interaction with children that invites individual growth of teachers and children."[57]

Developing New Leads for Supervision from the Hughes Study[58]

Hughes theorizes about how supervisors can help teachers view their own performance with increased precision. Her basic assumption is that the teacher must identify the area of the problem he has in his work. After this identification, the supervisor can help in either of two ways. He can give technical help so that the problem can be studied, or he might place the problem in a broader context making it researchable.

As the problem is studied, the teacher may need technical assistance before he becomes discouraged. Data are meaningless to the teacher unless he has help with their interpretation. Hughes notes that in most cases a group of three to five working on the same problem can be supportive of one another; however, she believes that this is not the case when teachers are working on their own records of classroom discourse. Personalized projects which focus upon modes of interaction help to effect changes in teacher behavior.

Hughes tells of the use of her studies on interaction analysis in university classes in order to help students understand their own teaching behavior.[59] Her own records of teaching and those of the students are analyzed. The Provo Code is used, but not for the purpose of learning the code as such. Rather, it is used as a means of asking questions about "what was communicated, what alternative behavior was open to the teacher, and what basis was used or might be used to guide the teacher in her decision."[60] Hughes reports that the use of the code seems to be most valuable when teachers take a limited number of categories and work with them rather than take the code in its entirety.[61]

---

[57] *Ibid.*, p. 102.

[58] Marie M. Hughes. Tucson, Arizona: University of Arizona. Response to survey.

[59] Information gathered at the time this paper was written.

Further Supervisory Applications of the Studies on Teaching

Fruitful leads to further research may be found in the work of other persons. Brief descriptions of related studies follow.

Student teachers are being helped to analyze their own teaching in a study in process at the time of writing.[62] The investigator is testing the Bellack and Davitz study that described the linguistic patterns of teachers in terms of classroom games. Many in-service implications are noted in the study.

Interaction analysis has been used in several experimental studies including applications with cooperating teachers and student teachers.[63, 64, 65] In one of these studies, the teachers were observed and tape recordings were made of the classroom discourse. When the information from the tape recordings was tabulated into Flanders' matrix, the teachers were presented with feedback.[66]

Research on the nature of teaching has led some investigators to turn their attention to certain concepts central to teaching which have a bearing upon supervisory practice. The studies on supervision in this section are descriptive and precise, like their counterparts on the teaching act.

---

[60] Hughes, *op. cit.*

[61] Marie M. Hughes, personal conversation.

[62] Anna Rockhill. New York: Teachers College, Columbia University. Information included in response to survey.

[63] Edmund Amidon. "The Observational Technique of Interaction Analysis Applied to the Classroom: Procedures and Limitations." Paper read at the American Educational Research Association, Chicago, Illinois, February 1963. (Mimeographed.)

[64] Edmund J. Amidon and Evan Powell. "Interaction Analysis as a Feedback System in Teacher Preparation." Paper presented at the 11th Annual ASCD Curriculum Research Institute, Washington, D.C.; November 1965.

[65] Richard Zahn. Glassboro, New Jersey: Glassboro State College. Response to survey.

[66] *Ibid.*

2. *Individualized Patterning of Teaching Behaviors: Relevant Studies*

Traditionally, persons who function in supervisory positions have been operating in highly personalized ways. What is observed and how these observations are shared with the teacher are usually worked out individually by each supervisor. Unfortunately, however, the supervisor is often in a position where he has nobody directly responsible for analyzing his underlying assumptions or for helping him determine whether his procedures are the most adequate way of implementing his basic ideas.

Two studies are now described and references are made to related studies in which open-ended structures are subjected to analysis and study through group supervision. In the studies described, the supervisor has an opportunity to become increasingly cognizant of his own style which can be highly personalized. The one basic premise here, as in the studies already described, is that the supervisor focuses upon the overt behavior rather than upon the internalized attitudes of the teacher.

Clinical Supervision: Personalizing the Process

A relatively new idea in the field of supervision is *clinical supervision,* which is defined as "supervision focused upon the improvement of the classroom performance of the teacher by way of observation, analysis, and treatment of that performance." [1] Clinical supervision is described in this section as it has been used at the Harvard-Newton Summer School in cooperation with a Harvard Graduate School Project in teaching.[2]

The *persons* for whom the project is planned are teacher interns, liberal arts graduates who are enrolled in a six week session at Harvard-Newton Summer School for practice teaching experience prior to an internship in which they will have complete responsibility for classroom instruction. Clinical supervision has inherent in it the concept of a staff working as a group. Membership includes the *interns, master teacher, special subject supervisors,* and *directors.*[3]

---

[1] Morris L. Cogan. "Clinical Supervision by Groups." *The College Supervisor: Conflict and Challenge.* Cedar Falls, Iowa: Association for Student Teaching, 43rd Yearbook, 1964. p. 118.

[2] Morris L. Cogan. "Supervision at the Harvard-Newton Summer School." Cambridge: Graduate School of Education, Harvard University, 1961. (Mimeographed.) Included with response to survey.

[3] *Ibid.,* p. 6-11.

The *purpose* of the clinical supervision program is twofold: (a) to offer an opportunity for practical experience in teaching prior to the intern experience; (b) to offer an experience in teaching during which the intern's teaching behavior can be judged. In working with interns, the improvement of individual teaching performance is the foremost objective. Assuming that teaching behavior is flexible and capable of being individualized, the intent of clinical supervision is to help interns develop personalized teaching styles. The distinction is made that clinical supervision is concerned with changes in behavior in regard to teaching, not with changes in personal characteristics.[4]

The basis for group supervision rests on three points: (a) greater efficiency can be noted, (b) feelings of concern and fear are lessened, and (c) agreement among group members has the effect of persuasion for the individual.[5]

The *procedures* for clinical supervision involve a *means of understanding what takes place during teaching* and a *means for improving teaching*. Descriptions of these two procedures follow.

To *understand what takes place during teaching*, Cogan suggests that the supervisors begin with observations of the pupils' behavior rather than the usual observations of the teacher's behavior.[6] The supervisors attempt to get at the relationship between teacher intent and pupil behavior. These data might indicate whether pupils tend to extend, to halt, or to react apathetically to the plan of the teacher. For example, supervisors might want to note pupils' behavior in relation to the following:

How assignments are undertaken
How inner-directed work is pursued
How problems are solved
How ideas are synthesized
How affective learning takes place
How relationships are prompted between the new and the known
How evaluation occurs.[7]

Several observations of pupils' behavior are made during a teaching session. The lesson is then analyzed in terms of what the teacher did before, during, and after the lesson. The relationships of the intern's performance to the events of instruction are then synthesized into patterns. The supervisors can help the intern change his teaching patterns to adjust to his broadened perceptions of fruitful teaching behavior.[8]

[4] *Ibid.*, p. 14.
[5] Cogan, "Clinical Supervision by Groups," *op. cit.*, p. 118-19.
[6] Cogan, "Supervision at the Harvard-Newton Summer School," *op. cit.*, p. 17.
[7] *Ibid.*, p. 19.
[8] *Ibid.*, p. 27-28.

The procedures of understanding what takes place during teaching might be summarized in this series of steps which Cogan suggests:

1. Observe pupil and teacher behavior during several related class sessions.
2. Note the most obvious behaviors of the teacher and the behavior patterns that evolve during the teaching.
3. Select patterns that can be changed when certain elements such as the supervisor's skills and the time available are taken into consideration.
4. Stop the analysis when manageable patterns of behavior are recognized by the teacher.
5. Establish a program for helping the teacher develop his own personalized style of teaching.[9]

A *means for improving teaching* is provided through the group supervisory conference. The conference is based on the group of objective facts about the teaching performance that were gathered during the observation. As the conference begins, the intern who has done the teaching relates his understanding of what occurred. When appropriate, the master teacher or another supervisor invites the intern to discuss further some of his statements. Following this procedure, other interns and supervisors share their perceptions of the teaching. Plans are then made for the next teaching session, using some of the insights gained during the conference.[10]

During the conference, the group works to reinforce the strengths of the interns, not to eliminate the weaknesses. A great deal of emphasis is given to the morale of the teacher, with every opportunity being taken to help the intern gain confidence. Long-term strategies for the improvement of teaching are developed rather than short-term goals.[11]

The *products* of clinical supervision programs, aside from the training given to the interns, include theories, principles and techniques. New insights have been gained into ways of collecting data, strategies for treating teachers, psychological rationale, feedback from pupils, and training of supervisory personnel.[12]

Clinical Supervision in a Public School Setting

Several adaptations of Cogan's theories are in process or have been used experimentally. An example of such an adaptation is described here.[13]

---

[9] *Ibid.*, p. 29.

[10] *Ibid.*, p. 30.

[11] *Ibid.*, p. 29.

[12] Morris L. Cogan, University of Pittsburgh, Pittsburgh, Pennsylvania. Response to survey.

[13] Robert Goldhammer. Description of Clinical Group Supervision based in part on an address delivered to the Advisory Committee for the Graduate Teaching Internship at the University of Pittsburgh, no date given. (Typewritten.) Included with response to survey.

The *persons* involved were eight elementary school interns and two supervisory teams of four members each. The interns were students from a large city university; four interns taught each semester. Supervisory personnel included persons who regularly held principalships or other supervisory positions in a public school system near the university. The project director was associated with the university.

The *purpose* of the program was that of a pilot study in group supervision. The project was underwritten by the city school system and endorsed by the university.

The *procedures* included a seminar for supervisors similar to one given by the university but conducted on a smaller scale.

When the supervision of the interns began, each supervisory team worked during alternate weeks with two interns. On these occasions the team went through two supervisory "cycles" with each intern and later the team met without the interns to analyze their own behaviors. Each cycle included *"preplanning, observation, analysis-strategy, supervisory conference,* and *postmortem."* [14] These elements of the cycle are described in the following summary of a supervisory pattern.

The supervisory team and the intern met together for the *preplanning* immediately prior to the teaching of the lesson. The intern discussed his plans for the day so that the supervisors were aware of the teaching goals. Few changes were suggested for the plans since little time was available for the intern to make modifications.

During the *observation* the supervisors took exact accounts of the teacher's and pupils' verbal behavior and noted briefly their nonverbal behavior. At times the supervisors divided their observational tasks so that certain supervisors made notations of factors such as teacher behavior while other supervisors noted factors such as pupil behavior.

The supervisors met together during the *analysis-strategy conference* while the intern worked independently. Both the supervisors and the intern used procedures similar to those that are described below. The data from the observation were reviewed in order to find patterns of teacher and pupil behavior. The patterns which seemed important and most amenable to change were selected for a threefold analysis: (a) to strengthen effective patterns, (b) to eliminate ineffective patterns, (c) to modify patterns that contained elements of both types of pupil behaviors.[15]

When the patterns were selected, the team members developed "strategies" that they would use during the supervisory conference. They decided on ways in which they would conduct the conference and developed ideas for the lesson plans. Throughout the supervision, stress was upon "process goals as well as content goals and behavioral as well as cognitive outcomes." [16]

---

[14] *Ibid.*, p. 2.
[15] *Ibid.*, p. 3.

The *supervisory conference* consisted of analyzing the observational data from the lesson and building plans for the next lesson. The intern took the lead in the planning for the next lesson and usually concluded the conference with actual plans on paper.

Following the second day of supervision and the completion of the second cycle, the supervisory team met in a *postmortem*. They analyzed their actions as supervisors in much the same way that they had analyzed the intern's work.

The *products* of this program of group supervision were noted in the form of interns' reactions and comments: (a) Group supervision offered the interns the opportunity for contact with persons who provided more intellectual stimulation than would be likely with individual supervision; (b) because the use of rational processes, such as decision-making, was open to the entire group, there seemed to be fewer biases than when those processes were hidden; (c) the interns had the feeling that all were learners when they realized that the supervisors engaged in the postmortem analysis of their own work; and (d) the supervision provided opportunities for the use of many types of educational specialists.[17]

Fruitful Leads to Further Research

Other theories and programs that view supervision through open-ended means are in various stages of development. Two such projects are briefly described in the following paragraphs.

Attempts are being made to change the teaching behavior of experienced teachers through clinical supervision. During an intensive seven-week summer program teachers work on some of the principles developed by Cogan.[18] Another workshop based on Cogan's work employs role playing and analysis of tapes. For one week, supervisors focus upon developing their skill in observation.[19]

How teaching is viewed can be determined prior to observing the classroom setting, or it can be seen in patterns which emerge from the context of the situation. This chapter has been concerned with conceptions and analyses of teaching which are generated within the actual situation. That the supervisor can organize the behavior which he sees in the classroom into patterns which possess points of emphasis and priority allows for infinite variety in personalizing supervisory practices.

---

[16] *Ibid.*, p. 4.

[17] *Ibid.*, p. 5.

[18] Marilyn L. Raack, University of California at Los Angeles, Los Angeles, California. Response to survey.

[19] Richard D. Zahn, Glassboro State College, New Jersey. Response to survey.

3. *From Source to Insight: Unanswered Questions*

On several fronts one can find attempts being made to provide new insights into our understanding of teaching and supervision. Many of the current studies are characterized by increased emphasis being given to accuracy of perception and concreteness of reporting. In some instances the intent is to personalize the supervisory act as much as possible.

Three types of studies have been described: (a) studies which attempt to describe overt teaching behavior with discrimination and precision, (b) studies on supervision which have counterparts in teaching, and (c) studies on supervision which encourage the individual supervisor to pattern his observations in ways which make sense to him and hopefully the person whom he is supervising.

From the studies cited in the previous chapter, it is evident that the linkage between supervision and teaching is such that current work on teaching might provide powerful insights for substantial further understandings into the field of supervision. In our selection of studies, emphasis was placed upon the relative weight given to frameworks developed prior to data gathering as opposed to those developed after the data gathering process. That there is room for both in the improvement of supervision and teaching was indicated. Many other fields which might have been explored in our effort to find new insights about supervision were ignored in order to delimit the topic.

As new insights into personalizing supervision were considered, several areas seemed to merit further investigation. Only three are cited here. These areas are: (a) further sources in the area of teaching which will enable increased understanding of supervision, (b) the preparation of supervisors in light of knowledge about teaching and human behavior in general, and (c) the relative worth of individual as contrasted with group supervision.

Each of these points is now briefly explored.

Teaching as a Source for Deriving Further Supervisory Knowledge

Within the field of teaching exists a substantial body of knowledge, the bulk of which has not been explored fully in reference to the improvements of supervision. Further study of teaching should enable supervision to take on much sharper perspectives, if inherent in the definition of supervision is the notion that supervision is a modification of the teaching process which involves the interaction of two adult minds.[1]

As investigation is made into the nature of teaching and its relationship to supervision, several questions need to be raised and hopefully to be answered. These questions relate to the translation into supervision of insights from teaching.

The philosophical language analysis as used in the Bellack studies is one means of viewing teaching. Is this a fruitful method for deriving insights for supervision?

What type of training is needed for the persons who must translate the research from teaching into productive and usable applications for supervision?

Must any cautions be placed on the wholesale transfer of research results from teaching to supervision?

Can the theoretical bases underlying studies that deal with adult/child, individual/group situations be adequately transferred to adult/adult, individual/individual situations?

What procedures might yield the most fruitful results as insights from teaching are translated into supervision?

How can existing predetermined frameworks of teaching be adapted so that supervision can be analyzed in patterns similar to those being used to analyze teaching?

What further advantages and [illegible]s can be cited concerning the use of personalized or predetermined frameworks in either supervision or teaching?

Traditionally, curriculum and supervision have been rather closely linked. Until the recent upsurge of interest in this field, the study of teaching has received relatively little attention in this country. We need to be concerned about how to bring the three fields of curriculum, supervision and teaching together so that each is singularly enhanced while at the same time the interrelationship of the three is also clarified.

Questions clustered around the relationships among teaching, curriculum and supervision include:

What are the boundaries of each of the three fields of the educational enterprise?

What are the points of overlap?

Should there be a rearrangement of boundaries so that more powerful and precise insights might emerge from the profession?

Teaching and supervision are inextricably bound together. As teaching becomes increasingly refined, so should supervision. The most fruitful ways of deriving insights, each from each, need to be continuously reexamined. In like manner, insights from administration, guidance and other related fields should be sought.

---

[1] For a careful analysis of the body of literature available about teaching, see N. L. Gage, editor. *Handbook of Research on Teaching.* Chicago: Rand McNally & Co., 1963.

The Preparation and Continuing Education of Supervisors

To catch data within the predetermined framework described by Flanders and others, and to pattern teaching behavior in the open-ended ways proposed by Cogan and his colleagues demand a new dimension in programs for the preparation of supervisors. In addition, another dimension of supervisory tasks, primarily the conference, needs investigation as to appropriate ways of preparing personnel to handle this dimension adequately.

Because our concern has been with the supervisory conference and observation, questions related to the preparation of supervisors are raised as they relate primarily to these two areas:

> What should be the components of a supervisor's program of preparation which would enable him to work with another individual with maximum effectiveness?
>
> What guidelines should the neophyte supervisor be taught which will enable him to select, from a variety of ways of viewing teaching, those which he feels he can handle most effectively?
>
> What specific experiences will help supervisors use effectively the frameworks described earlier?
>
> Since all the frameworks tend to focus on explicating the *overt* teaching behaviors of the teacher, what experiences will help the supervisor determine when, if ever, to deal with other than overt behaviors?
>
> What insights for supervision might be derived from study in fields such as communications and business management?
>
> Should the supervisor be prepared in the use of technical equipment such as audio-visual media and computers? If so, how?
>
> Should the supervisor-to-be be required to matriculate in a residency experience? If so, what specific opportunities for experience should be included that are not now commonly found in programs for the preparation of supervisors?

Obviously, no matter how extensive the resources of a school district, no school is going to be able to provide the quantity of supervisory help often considered necessary for a good school program. In addition, a question might be raised as to whether an overabundance of supervisory assistance is, in the last analysis, helpful in a school setting. Ultimately the goal of supervision within a democratic society should be to build, within teachers, skills of self-analysis and self-direction. By helping teachers see colleagues as a valuable source of mutual growth, and by encouraging teachers to use media such as tape recordings, movies or kinescopes, the supervisor can acquaint teachers with a variety of resources available for self-improvement.

The supervisor therefore needs within his own preparation those modes of working with persons which stimulate them to further activity long after the supervisor has left the supervisory conference and observation. How a supervisor inspires the teacher to self-activity and to a desire for continuing study is an area deserving further investigation. No school system will ever be able to afford supervisors who are merely prodders, nor can any society afford teachers who need perpetual jabs for growth. Teaching as a total enterprise necessitates supervisors who possess the tools to stimulate inquiry in others and teachers who are eager to improve their own teaching and who view supervision as only one source of self-enhancement.

If the assumption is accepted that teachers can and should become increasingly self-directing, the preparation of supervisors will demand answers to the following questions:

What can be learned from theories of motivation that should be included in the preparation of supervisors?

What types of field service will enable the potential supervisor to evaluate his ability as a catalyst?

What criteria will the supervisor apply to judge the usefulness and effectiveness of audio-visual media which teachers may utilize as they seek to gather data about their own teaching?

How can the supervisor prepare teachers to work with each other so that mutual help can be gleaned from the peer group?

How can supervisors determine which modes of describing teaching behavior will be likely to lend themselves to rather easy handling by specific teachers as they work together in the improvement of their teaching?

How can supervisors evaluate the impact upon teaching of groups of teachers working without direct supervisory intervention on the improvement of the teaching process?

Much emphasis within this booklet has been upon the description of teaching and supervision. When one focuses upon description, to deal with the verbal is far easier than to treat the nonverbal. Hence, a need exists to develop theories and designs of supervision which give attention to the nonverbal and the subtler aspects of teaching and supervision as well as to the verbal. As supervisors study what transpires within the classroom, perhaps insights also can be gained about how best to catch the affective and nonverbalized actions in the classroom setting.

Questions such as the following need to be answered:

How can supervisors learn when to operate using logical modes of analyzing teaching and when intuitive insights should be given precedence over the logical?

What are the best means available for catching the nonverbal within the classroom setting? How can supervisors best treat what is captured?

What knowledge can be derived from related fields, such as social work or psychiatry, for the handling of the affective within the interactive situation?

What ought to be the personal qualifications of supervisors, who will eventually need to make intuitive decisions concerning teachers? To what degree should personality components of the supervisor affect his certification?

How can supervisors continuingly develop self-understanding so that they have an awareness of their personal biases and limitations that influence their work with others?

Group Versus Individual Supervision

Although many advantages are inherent in the one-to-one relationship common in classroom observations and follow-up conferences, the unique features of the person-to-person relationship merit further investigation. A need also exists to study simultaneously the points at which groups working together can enhance the knowledge of supervision or of teaching. For example, we need to know more about how one supervisor can work effectively with a group of teachers or about how several supervisors working together can gain new insights about themselves either while working with individual teachers or with groups. Decisions as to when the supervisor should best work with the student alone and when with groups will help the supervisor know how to allocate his time and other resources to the many tasks that crowd upon him.

When the supervisor is determining whether to individualize or to work with groups in his encounters with teachers, perhaps he needs to answer the following questions:

Is an element of confidentiality apt to be necessary in the conference?

How do the persons who might meet in a single conference work together?

What kinds of things might a supervisor feel free to discuss in a group conference? in an individual conference?

What factors related to teaching might teachers feel more competent to explore in a particularized situation? What factors within a group context?

What techniques for small group interaction might be effective?

What factors related to teaching could be handled more efficiently and more effectively in a group setting than in an individual conference?

The idea of supervisors working together to enhance not only their own performance but that of their colleagues is a promising one. With the increasing emphasis upon supervision in special subjects both in the elementary and secondary school, supervisors might well use the wisdom and experience of peers to understand themselves better within the supervisory situation.

As supervisors observe their peers, fruitful leads might emerge that could perfect the nature of the art generally. Perhaps through working together in observing and later in acting in mutually supporting ways during conferences, supervisors can become increasingly skilled in utilizing techniques that make for better personal practice. Questions such as these bear answering:

What kinds of frameworks in the style of Flanders or Amidon might be helpful for supervisors to use with each other?

What can be done in a group supervision situation which will enable supervisors to develop unique supervisory styles?

What kinds of supervisors would probably profit from working with other supervisors? How might the ones be identified who would not thrive in a group supervision setting?

Questions are many relative to the improvement of supervisory behavior. Yet, what knowledge we do have can be tentatively categorized to give us some possible ways of proceeding. An examination of such ways is the intent of the next part of this booklet.

Part Three

Modes of Personalizing Supervision

Central to the supervisory act is the encounter of two persons. One performs tasks primarily related to teaching; the other, tasks related to supervision. What transpires during the encounter partially determines what will subsequently affect children.

Despite the potential cruciality of the supervisory act, our knowledge either of what actually happens or of what ought to take place is scant and tentative. The theme of the preceding pages, therefore, has been that much of the current research on teaching and related work focusing upon supervision may have some insights that would encourage the practice of supervision with increased finesse and assurance. The field of teaching is seen as a source of new ideas, despite the fact that an adequate conception of supervision should ultimately be derived from many fields of knowledge.

Although supervision can and does take many forms, we have chosen to examine the one-to-one encounter between teacher and supervisor that may take place during an observation and follow-up conference. Most of the principles discussed, however, can be implemented in a situation in which the supervisor works with many.

As a supervisor works with a teacher, he may find himself operating in certain ways or in a pattern typical of himself in his regular encounters with teachers. Four stances from which the supervisory encounter may be viewed are described in this chapter.

The first stance is that of *scientific supervision,* supervision through description of overt behavior that is facilitated by predetermined frameworks. In this mode of supervision, tools which insure exactness and precision are used rather extensively.

The second stance, *nondirective supervision,* involves the use of open-ended techniques. Here the perceptions of the teacher heavily influence the direction of supervisor-teacher interaction. Experiences are patterned into designs which have meaning for the teacher but which may not ordinarily have been predetermined by the supervisor or any other outside person.

The third stance is *multi-faceted supervision* and is characterized by the use of many and varied techniques depending upon the nature of the supervisory situation. At times, the supervisor may use the categories developed by other persons and attempt to describe teaching behavior within predetermined patterns. On other occasions, the supervisor may elect to work within the understandings and meanings of the teacher. The extensiveness of the variety of techniques employed is hindered only by the supervisor's ingenuity.

The fourth stance, *person-to-person supervision,* differs from the previous three in that the supervisor as well as the teacher participates in the supervisory act to the degree that both are changed by design. The other three stances assume direct change only on the part of the teacher. From this stance, the many supervisory practices common to the other stances may be employed. In addition, however, techniques are employed which provide the supervisor with direct opportunities for growth.

The remainder of the chapter contains an examination of each of the stances in terms of its purposes, requisite supervisory skills, and techniques. Included also are brief illustrations and discussion. The reader may note that some aspects of the stances parallel much of the work on teaching described earlier.

Scientific Supervision

Purpose

Inherent in scientific supervision is the improvement of teaching through the gathering and interpreting of the teacher's classroom behavior within categories which have been determined prior to the observation. The categories are ordinarily precise enough so that the skilled person can use the instrument with a high degree of accuracy. Hence, another purpose of scientific supervision is the gathering of a body of observable and quantifiable data which can be used in the improvement of teaching and can also add to knowledge about teaching.

Supervisory Skills

The supervisor who assumes the stance of seeing supervision primarily as a scientific enterprise has keen skills of observation and the ability to categorize accurately within a given framework. He is competent in research design and he values research procedures in which the variables are easily controlled. He possesses skills of analysis, statistics, and interpretation of research findings. These skills are used for classifying the verbal behavior of teachers within predetermined categories.

This supervisor is also skilled in the use of audio-visual media, such as tape recorders and cameras of various types. He has ability to capture some of the sounds and sights of the classroom. He has learned how to categorize pictorial data into patterns, but he is unable to obtain the precision with nonverbal data that he can with verbal.

Techniques

The techniques of scientific supervision involve the utilization of predetermined frameworks in which clearly defined categories determine how the supervisor views the situation in a classroom. During the visit, attention is directed toward gathering information relevant to the design, which has been developed either by the supervisor or others prior to the observation. If the design is preplanned, the supervisor may use audio-visual equipment to gather examples of teacher behavior on tape or film.

Following the observation, the supervisor or a person he designates analyzes and quantifies the material which he has gathered. In a later conference the supervisor shares with the teacher examples of his teaching behavior, as evidenced by the data which the supervisor had previously categorized. The need for behavioral change on the part of the teacher may be seen by either the teacher or supervisor as a result of an analysis of the material.

An Example

The supervisor enters the classroom with graph-like sheets of paper. Along the left-hand margin is a list of 14 verbal behaviors common to classroom teachers. For example, one heading says, "supportive language," another "content development."

The supervisor takes a seat at the rear of the room and begins checking on the sheet of paper the type of response the teacher makes each time she interacts with children. This procedure continues for about 45 minutes, after which the supervisor makes an unobtrusive exit.

In the quiet of the office the supervisor tabulates the responses con-

cerning the teacher's verbal behavior. Two days later the supervisor arrives at the school immediately following its close to discuss the analysis of the observation.

The supervisor informs the teacher that within a 45 minute period she asked 25 questions, gave 10 commands, praised children five times, and described six times.

The teacher ponders the nature of her commands and decides to study them on her own during the coming week. During the next observation, the supervisor indicates that he will bring a movie camera. In addition to utilizing the instrument used during the past observation, he will attempt to get on film some examples of nonverbal behavior.

Discussion

Strengths. The use of carefully designed frameworks to describe teaching behavior adds a new kind of precision to teaching and to supervision. With the collection of data that can be analyzed and quantified within predetermined categories, the supervisory observation and conference moves from the realm of "I think" to "This is what happened." The teacher has objective baseline data from which to make desired changes in his own behavior, even if the data do not account for all the variables within the classroom.

In addition, the gathering of significant quantities of precise data about teaching adds to the knowledge about teaching. Persons are better able to describe the teaching act and thus to bring intent and practice together.

Weaknesses. An obvious weakness of scientific supervision is that the instrumentation and procedures which are part of the design for supervisory practice do not place a central focus upon the perceptions and immediate concerns of teachers. The predetermined categories of the frameworks important to classroom observations and conferences may structure the situation in such a way that the teacher's ideas about what really matters are not given a hearing. Supervision is personalized only to a very limited degree, in that sources which may be irrelevant to the teacher play a dominant part in this observation and conference.

Furthermore, variables which are not readily or easily described may be lost in the attempt to be accurate and scientific. Ruling out ideas and judgments not yet fully developed may negate insights which are often prelude to new discoveries. Oftentimes these insights may not fit into the scheme of the supervisor interested in scientific supervision, and therefore, a potentially good or useful thought may be lost.

Further lines of inquiry. As work continues on the refinement of instruments designed to describe teaching, perhaps two additional dimensions need to be explored: (a) how can we get at the perceptions of teachers during the supervisory act when a prescribed mode of viewing teaching is being utilized? and (b) how can we ascertain children's perceptions of what is transpiring in the classroom during a period of observation? Data are quite incomplete that focus only upon the perceptions of one party—in this case, the supervisor. The next steps in the development of predetermined frameworks for use in describing teaching demand much imagination as ways are sought to get at the perceptions of persons being observed.

Nondirective Supervision

Purpose

Supervision through indirection or nondirection is concerned with the improvement of teaching through providing opportunities for teachers to become increasingly cognizant of their own perceptions, goals, needs and desires. The purpose of increasing self-awareness is to insure the continuous development of process skills among teachers. Such skills involve analyzing, evaluating, interpreting, synthesizing, etc. As teachers develop these skills, their own experiences take on increased meaning and allow for greater proficiency in working with children.

Supervisory Skills

The supervisor who is primarily nondirective in his contacts with teachers has learned to see the teacher as being the major source of change within himself. An outside person with his ideas and modes of persuasion can only influence another person if the outsider has his intellectual and emotional equipment attuned to that which the person being helped has to say. For this reason, to start from the frame of reference of the other person insures greater likelihood of communication about ideas of concern to the other. The implications for the supervisor-teacher relationship are that the most necessary skill of the supervisor utilizing nondirective techniques is being able to view situations and persons from the stance of the teacher.

The supervisor has skill in helping the teacher arrange the teacher's insights, knowledge and feelings into patterns that make sense to the teacher himself. The supervisor helps the teacher prize intuitive knowledge as well as that derived from more logical sources.

The supervisor has at his command a wide range of counseling techniques which enable him to deal in a comfortable manner with that which is unknown to him but which often lies latent in the mind of the teacher. The flow and unevenness of human experience are prized. The supervisor's modes of operation are such that he is able to capture the essence of the teacher's being and to cause him to understand himself so that he brings clarified conceptions of himself to the teaching situation.

Techniques

The supervisor, employing techniques of indirection, takes cues for his behavior from the perceived behavior of the teacher. If the observation is used, the supervisor attempts to see, through the eyes of the teacher, what is transpiring in the classroom. Observation may be facilitated through the use of a plan developed by the teacher or a framework for the description of teaching that the *teacher* has developed.

Oftentimes the observation may have no previously planned guidelines but may be initiated through a casual conversation with the teacher. The supervisor then pieces the activities of the classroom together in a way which makes sense to him and hopefully to the teacher.

During the ensuing conference, the supervisor may play the role of facilitator or clarifier. He seldom, if ever, prescribes next steps for the teacher, but assumes that he will make his own decisions for changes in behavior. The supervisor often will rephrase what a teacher has said so that the teacher can determine whether what he is saying is what he really means. He may ask questions which enable the teacher to probe deeper into his own beliefs and understandings. Questions are used sparingly, however, for the way a question is phrased may cause intended indirection to move toward direction.

An Example

The supervisor enters the room and is handed a guide to the teaching which the supervisor will observe that morning. By prearrangement the supervisor and teacher had decided that the teacher would make out a plan for what he would like to have him observe. In the past, occasionally the teacher had made out a lesson plan, but today the teacher had decided to ask the supervisor to look at some aspects of his verbal behavior, such as the nature of his questions, his use of praise, his use of criticism, and six other items.

During the observation the supervisor makes some notations about the items observed and then quietly leaves the room—a conference after school having been prearranged.

When the teacher and the supervisor later meet in the teacher's room, *the teacher initiates the conference by commenting upon some of the questions asked during the lesson. Occasionally the supervisor asks a question, such as, "How would you have phrased the question differently?" or comments, "You think Joan didn't understand that question?" as he summarizes some of the teacher's statements.*

The conference moves along with the teacher assuming the responsibility for shifts in thought. The supervisor often paraphrases what the teacher has said in order to facilitate clarification of the teacher's own thinking.

At the end of the conference the two separate with plans for a visit again in three weeks. The teacher is free to plan for the next visit in any way he sees fit.

Discussion

Strengths. The strengths of supervision in an indirect manner reside in two factors: (a) The perceptions of the teacher are the key to the observation and conference; and (b) the moment of *now* is crucial in both the observation and conference.

Whereas, in the more scientific type of supervision described earlier, the emphasis was upon the use of predetermined frameworks for the improvement of teaching, in nondirective supervision the teacher is free to utilize the supervisor in a variety of ways. The common method is an observation with a broadly conceived plan designed by the teacher, followed by a conference in which the plan may or may not be used. The teacher is usually the initiator of the conversation during the conference with the supervisor assuming the role of clarifier, questioner and facilitator.

Another strength of indirection is the possibility of capitalizing upon the present moment. Since the teacher is at the helm, he may choose how the conference will turn, constantly using his own perceptions, to determine movement within the conference. Ideas that are a source of strength or trouble to the teacher are not lost in the attempt to stay within the prescribed limits of more technical modes of supervision. At times the conversation may swerve into uncharted areas. At other times, one point common to the teaching-learning act may be pursued in detail.

Weaknesses. The lack of objectivity which may be a strength in this mode of supervision may also be one of its chief weaknesses. Because of the absence of a clear focus, continuity of growth cannot be assured. Each supervisory encounter may become a discrete experience. Problems related to prediction and control of teacher behavior multiply as the range of human characteristics interplay during the teacher-supervisor encounter.

The nature of the persons involved may also be a weakness at times. The teacher who does not see beyond the obvious may not move beyond seeing superficialities if the direction of the conference is primarily in his hands. Real growth may not be promoted because the teacher does not realize the wide range of available teacher behaviors.

Likewise, the supervisor's wholeness as a person may heavily influence the character of his performance. If the supervisor brings biases and preconceived notions based upon inadequate assumptions, or if he brings a narrow view of human behavior, the nature of his interpretations may deter rather than facilitate the improvement of teaching.

Further lines of inquiry. The supervisor who selects an indirect approach in working with teachers probably needs skill and knowledge that are not now common in programs of preparation for supervisors. Insights from psychotherapy, social work, and related fields indicate that programs to prepare educational supervisors probably need additional types of experiences to insure a wider range of skills among instructional leaders, particularly supervisors.

Among the skills which need refinement if the nondirective supervisor is to be effective is the ability to see the more subtle aspects of human behavior. The supervisor can be more effective if he knows how to derive clues from inflections of the voice, from gestures and signs, from emotion-laden words.

The supervisor also needs a program which provides opportunity for practice in hearing the verbal reports of the teacher with accuracy. Until the supervisor has learned to listen with a minimum of distortion, he cannot adequately help the teacher listen to a child within the framework of the other person.

The art of questioning is another area bearing further inquiry. How to question so as to clarify issues but to minimize threat is a skill which should be developed and prized by supervisors. The art of dialogue which enables the teacher to see himself in clearer perspective needs to be cultivated if the supervisor is to handle nondirective techniques effectively.

Multi-faceted Supervision

Purpose

Multi-faceted supervision is concerned with the improvement of teaching through the selection, from a repertoire of supervisory techniques and behaviors, those most appropriate for the situation, person and time. Multi-faceted supervision is contextually oriented, the setting being the primary determinant of the modes of supervision employed.

Supervisory Skills

Because of the diversity of situations in which a supervisor might find himself, this supervisor has at his disposal a tremendous range of skills for working with teachers. The supervisor knows the intricacies and available tools of research design. He is skilled in organizing and patterning when a framework is not present. He can also categorize with facility when the nature of the task necessitates working within predetermined categories. In dealing with teachers he can be nondirective or directive as the occasion demands. He possesses flexibility of thought, at times relying on the use of logical processes, at other times upon intuition.

The supervisor has great facility in appraising a situation and pulling out the critical elements having a bearing upon instruction. He is aware of the possible impact of prevailing community attitudes, the backgrounds and perceptions of children, the expectations of the school's administration, the availability of instructional materials, and a host of other factors which come to bear upon a teacher's behavior. Most of all he has learned that each teacher tends to perceive the components of his environment in different ways. Considering these many factors, he has learned to select the most promising approach to the teaching behavior of a given individual. In the supervisor's encounters with teachers, the combinations of behaviors he exhibits with and elicits from teachers are innumerable. Only the supervisor's own intellectual and emotional shortcomings limit opportunities for optimum growth in teachers.

Techniques

As the necessary skills for multi-faceted supervision might indicate, the techniques employed during observations and conferences are variable and numerous. However, as the supervisor develops his own style of supervision, certain patterns may emerge. For example, he may discover that Teacher X is much more responsive to supervisory modes of the technical nature described earlier, whereas Teacher Y seems to show greater growth in his teaching if primarily nondirective supervisory modes are used. Teacher Z prefers an interplay of more precise modes of supervision interspersed with opportunities for discussion very open-ended in nature. At times this teacher wants an opportunity to reflect upon his own perceptions of his teaching behavior. At other times, he desires new insights to be gathered from viewing teaching through predetermined frameworks.

Patterns of supervision may remain rather similar for some teachers and be constantly changing for others. The foremost characteristic of multi-faceted supervision is its multiplicity and diversity of forms when considered in its entirety.

An Example

As the supervisor enters the room he takes out a small eight millimeter movie camera and begins checking the lighting of the room. Today he will take a five minute reel of film to supplement the verbatim accounts he has been capturing of how the teacher develops content.

This teacher has previously indicated concern that subject matter be developed in a logical manner, and together the supervisor and the teacher have worked out the procedures that have been used during the last several supervisory observations.

Following the filming of critical incidents within a social studies lesson, the supervisor spends some time gathering verbatim accounts of several transactions between the students and the teacher during the lesson.

When the social studies lesson is over, the supervisor prepares to leave. He first has a word with the teacher regarding a conference which is arranged to be held during the noon hour a few days hence so that the film can be developed.

As the two parties later discuss the teaching of the morning, the supervisor plans with the teacher a scheme by which she can gather and analyze on her own further data relative to the development of content. The supervisor suggests, too, that one of the fifth grade teachers is also interested in many of this teacher's concerns and arranges for a three-way conference in which the supervisor assists them in establishing procedures for helping each other.

The supervisor feels that this teacher has made much progress on a selected problem through a series of rather closely spaced observations and conferences. He decides to leave the teacher to work with one of her colleagues for a few weeks while the supervisor concentrates his attention elsewhere.

Discussion

Strengths. Perhaps the greatest strength of this form of supervision is the latitude that is provided for the supervisor to utilize many resources and techniques in the supervisory process. He has freedom after ascertaining the nature of the situation, particularly the nature of the teacher within it, to utilize techniques which are primarily open-ended or to engage in supervisory practices which are more precise. The very great flexibility available to the supervisor permits him to change plans in midstream when a new course of action seems more fruitful. This form of supervision also allows for maximal creativity on the parts of both the supervisor and the teacher to elaborate upon, redefine or find new ways to utilize old supervisory practices more effectively.

Weaknesses. The strengths of multi-faceted supervision are also its weaknesses. The wide latitude of possible supervisory behaviors may be used optimally by the wise supervisor. The ineffective supervisor, however, may not be able to assess the potential impact of a supervisory technique upon the teacher.

Another danger of multi-faceted supervision at the present time is that programs to prepare instructional leaders may fail to take into account the range of interpersonal and technical skills needed by the supervisor. Thus, persons of ability may do less than a superior job because of lack of awareness of the tools available to the supervisor.

A further problem in multi-faceted supervision is the fact that the multitude of practices employed makes difficult the gathering of reliable knowledge concerning supervisory practices. The data are extremely diversified; and therefore to arrive at generalized interpretations is almost impossible.

Further lines of inquiry. Several areas seem to merit further investigation regarding the multi-faceted approach to supervision. First, attention might be turned toward the development of criteria for determining the most effective mode of supervision at a given time and within certain types of situations. Broad guidelines for selection of supervisory behavior would enable increased perfection of the art.

Second, further knowledge is needed regarding the selection of supervisors who are comfortable in working with the variety of techniques suggested by this mode of supervision. How to determine the degree of flexibility of thought and personality required for this type of supervision is a strand worth pursuing.

Third, further knowledge is needed about when to encourage teachers to work independently or with peers in the analysis and interpretation of teaching procedures. The timing and degree of participation in each teaching situation are subtle questions to which supervisors must find answers if they are to conserve their own energies for the most profitable use.

Person-to-Person Supervision

Purpose

Person-to-person supervision is concerned with the improvement of teaching and supervising through simultaneous attention to both educational acts and the persons performing them.

Supervisory Skills

The individual who is able to personalize supervision has been carefully selected for the position. In addition to skill in research design, theory development, statistical analysis, nondirective counseling, and other competencies of the three previous types of supervision, this supervisor has personal qualities which free and allow him to work with others in mutually satisfying ways. He has superior skills in the following: handling his own defenses, communicating with a wide range of persons at an introspective level, utilizing criticism with effectiveness, developing a coherent value scheme and making a positive impact upon others. In brief, he is a positive and dynamic individual.

Techniques

Like multi-faceted supervision, a wide repertoire of supervisory behaviors is utilized in person-to-person supervision. As in the previous type of leadership, the supervisor must have the judgment to exhibit behaviors appropriate to the situation. In addition, the supervisor, at times, divests himself of authority, status and characteristics ascribed to his position. He encourages the teacher to do likewise. The essence of personalized supervision is the interaction that can occur as two mature minds meet to enhance themselves as persons and to improve the situation of which they are a part.

The precise data of previously developed frameworks and the imprecise data of human gestures, conjecture, wonderment and awe are used to further the growth of both persons. The teacher has an opportunity to profit through use of the analytical tools which are currently being developed to describe teaching more adequately. The supervisor can, if he wishes, promote his own effectiveness through the encouragement of feedback from the teacher that enables the supervisor to see himself in clearer perspective. He attempts to ascertain whether his intent is congruent with his practice.

Supervision then becomes a learning situation for the supervisor as well as for the teacher. Through listening to responses from carefully framed questions concerning his own behavior, the supervisor can learn at a deep and fundamental level. In a sense, the supervisor employs techniques which promote the teacher-disciple relationship described by Buber[1]:

---

[1] Martin Buber. *Tales of the Hasidim.* (Early Masters, p. 8.) Quoted in Paul Pfuetze. *Self, Society, and Existence: Human Nature and Dialogue in the Thought of George Herbert Mead and Martin Buber.* New York: Harper Torchbooks, 1954. p. 123.

The teacher helps his disciples find themselves, and in hours of desolation the disciples help their teacher find himself again. The teacher kindles the souls of his disciples and they surround him and light his life with the flame he has kindled.

Through methods such as: questioning the teacher, using a third person to observe his conferences, adapting instruments for the analysis of teaching to the analysis of supervision, and making tape recordings the supervisor can learn to know himself better as a professional person. Although a supervisor cannot throw off the cloak of responsibility which is part of his position, he can assume a stance in which he is open to relating to people in new ways, to sharpening his values, to developing increased honesty and integrity in his sharing of self, and to gaining clearer insights concerning the causes of defensiveness and the formulation of invalid assumptions. He can become aware of times when he is responding only upon his own perceptions and failing to take into account the concerns and perceptions of others. He can know when he is afraid to show himself as a person and can assume the stance of mere role playing. He can note when the grace which makes one truly human has been stifled beneath the debris of picayune detail and less than a high quality of creativity.

The techniques of person-to-person supervision are concerned with showing oneself as a real and vital person. Certain of the techniques are subtle, but many can be caught—some even taught.

An Example

The supervisor enters the classroom, sets up a tape recorder, and walks around with a microphone during a reading lesson to help the teacher gather examples of children's perceptions of schooling. (The story was about the first day of school.) After about 15 minutes worth of tape are recorded, the supervisor pulls out a paper on which she records the teacher's response within 12 predetermined categories. This mode of catching the teacher's responses was developed jointly by a group of teachers and supervisors and is being used during supervisory visits when requested by the teacher.

After gathering these two kinds of data the supervisor prepares to leave, although a conference is arranged prior to her departure.

Later in the day the teacher and supervisor meet for discussion purposes. Several things transpire during the conference. First, the teacher listens to the brief tape recording and later talks about what she can do to follow up the conversation relative to children's perceptions of themselves. Then the supervisor shares with the teacher the data gathered through use of the new instrument. As a result of viewing the data, the *teacher finds she repeats too many of the children's responses and does not encourage them enough to build upon the responses of each other. She decides to try to encourage the children to interact more freely with each other in the future.*

When the discussion of the teacher's lesson ends, the supervisor asks, "How do you feel about the use of the checklist in the observation?" A discussion follows.

The supervisor then asks, "At what point in this conference or previous ones might I have done something that would have made my help to you more valuable?" Again the teacher responds with some specific suggestions.

As the conference terminates, the supervisor says, "I, too, am a learner. What insights do you have to make me more effective as I seek to work with you and other teachers?"

Discussion

Strengths. Person-to-person supervision differs from the other three types in that two persons are viewing each other as mutual sources of help and encouragement. The supervisor is not so much concerned about what he can do *to* the teacher but rather what the teacher and supervisor can do together to move toward mutually satisfying goals. Both strive to learn through their encounter with each other, and each views the other as a source of strength, insight and knowledge. In the dialogue which may follow a conference, the supervisor plans for his own learning, although he is careful not to make his own need for new insights a major goal of the encounter. Through a focus on teaching and a mutual respect for each other, the educational undertakings of both the supervisor and teacher are enhanced. Positions are seen as differentiated rather than hierarchical. The person is of prime significance. What the person does is seen in perspective.

Weaknesses. Perhaps the major weakness in person-to-person supervision is the fact that an analysis of the supervisor's own performance may be threatening to insecure or weak supervisors. Asking a teacher to help him in his task may not have been within the supervisor's perceived bailiwick of responsibilities, and he may be uncomfortable asking another for advice or help in areas that had formerly been closed. The supervisor's own fears and insecurities cannot be treated lightly. He needs judgment in discerning those persons with whom this type of supervision will be mutually enhancing, realizing teachers have certain responsibilities also in this mode of supervision. Such an approach will not be equally beneficial with all teachers.

In addition, person-to-person supervision is time consuming. The analysis of the supervisor's role often may take as much time as the analysis of the teacher's work. Careful budgeting of time, therefore, is necessary for this type of leadership.

Further lines of inquiry. Because the analysis of the supervisor's behavior is not now common practice, much needs to be done to refine this mode of supervision. Further attention needs to be given to the nature of questions which will help the supervisor gain insight into his own behavior.

Another line of inquiry might focus upon the use of a third person to assist in the analysis of a teacher-supervisor conference. Instrumentation designed to describe supervisory acts similar to some of the instruments available for the understanding of teaching needs to be developed. If such devices were available, supervisors could improve their practice through analytical as well as other means.

The supervisor's responsibility includes assistance to the teacher in making his teaching more in line with intent. Yet the responsibility is far greater than this. It includes the skill of being both the artist and the scientist at appropriate times. The task involves the supervisor's use of himself in such a way that both teacher and supervisor add to their professional stature while simultaneously seeing the deeper meaning of the word PERSON.

Selected Bibliography

Edmund Amidon. "The Observational Technique of Interaction Analysis Applied to the Classroom: Procedures and Limitations." Paper delivered at the American Educational Research Association, Chicago, 1963. (Mimeographed.)

Edmund Amidon and Michael Giamateo. "The Verbal Behavior of Superior Teachers." (Mimeographed.)

Edmund J. Amidon and Evan Powell. "Interaction Analysis as a Feedback System in Teacher Preparation." Paper presented at the 11th Annual ASCD Curriculum Research Institute, Washington, D.C., November 1965.

Edmund Amidon, K. M. Kies and A. T. Palisi. "A Fresh Look at Supervision." (Mimeographed.)

Edmund Amidon and John B. Hough. "An Experiment in Preservice Teacher Education." Paper delivered at the American Educational Research Association, Chicago, 1964. (Mimeographed.)

Harold H. Anderson, Joseph E. Brewer and Mary Frances Reed. *Studies of Teachers' Classroom Personalities, III: Follow-Up Studies of the Effects of Dominative and Integrative Contacts on Children's Behavior.* Applied Psychology Monographs, No. 11, 1946. Stanford University Press, Stanford University, California.

H. M. Anderson. "A Study of Certain Criteria of Teacher Effectiveness." *Journal of Experimental Education* 23: 41-71; 1954.

Mary Jane McCue Aschner. "The Language of Teaching." *Teachers College Record* 61(5): 242-52; February 1960.

A. S. Barr. "The Measurement and Prediction of Teaching Efficiency: A Summary of Investigations." *Journal of Experimental Education* 16: 203-83; 1948.

Arno A. Bellack, editor. *Theory and Research in Teaching.* New York: Bureau of Publications, Teachers College, Columbia University, 1963.

Arno A. Bellack and Joel Davitz. *The Language of the Classroom.* New York: Teachers College, Columbia University. U.S. Office of Education Cooperative Research Project No. 1497, 1963.

Arno A. Bellack *et al. The Language of the Classroom, Part Two.* New York: Institute of Psychological Research, Teachers College, Columbia University, U.S. Office of Education Cooperative Research Project No. 2023, 1965.

Louise M. Berman, editor. *The Nature of Teaching.* Milwaukee: University of Wisconsin-Milwaukee, 1963.

Reba Burnham and Martha King. *Supervision in Action.* Washington, D.C.: Association for Supervision and Curriculum Development, 1961.

Morris L. Cogan. "Supervision at the Harvard-Newton Summer School." 1961. (Mimeographed.)

Morris L. Cogan. "Clinical Supervision by Groups." *The College Supervisor: Conflict and Challenge.* Cedar Falls, Iowa: Association for Student Teaching, Forty-Third Yearbook, 1964. p. 114-31.

Morris L. Cogan. "Theory and Design of a Study of Teacher-Pupil Interaction." *Harvard Education Review* 26(4): 315-42; Fall 1956.

F. G. Cornell, C. M. Lindvall and J. L. Saupe. *An Exploratory Measurement of Individualities of School and Classrooms*. Urbana: College of Education, University of Illinois, Bureau of Educational Research, 1952.

Leonore W. Dickmann. "Education of Intern Teachers: An Experiment with Ned Flanders' Interaction Analysis Technique and Projection of Research." Madison, Wisconsin: School of Education, University of Wisconsin. U.S. Office of Education Small Contract Project Proposal, 1964. (Mimeographed.) This study is in process at the time of writing.

Ned A. Flanders. "Analyzing Teacher Behavior." *Educational Leadership* 19(3): 173-80; December 1961.

Ned A. Flanders. "Interaction Analysis: A Technique for Quantifying Teacher Influence." Paper delivered at the American Educational Research Association, Chicago, 1963.

Ned A. Flanders. *Teacher Influence, Pupil Attitudes and Achievement: Studies In Interaction Analysis*. Minneapolis: University of Minnesota. U.S. Office of Education Cooperative Research Project No. 397, 1960. (Mimeographed.)

Ned A. Flanders and Edmund Amidon. *The Role of the Teacher in the Classroom*. Minneapolis: Paul S. Amidon and Associates, Inc., 1963.

N. L. Gage, editor. *Handbook of Research on Teaching*. Chicago: Rand McNally and Company, 1963.

N. L. Gage, P. J. Runkel and B. B. Chatterjee. *Equilibrium Theory and Behavior Change: An Experiment in Feedback from Pupils to Teachers*. Urbana: Bureau of Educational Research, University of Illinois, 1960.

Milton J. Gold. "Figures 3, 4, 5" (OScAR 3d, 3e, 3f). New York: Hunter College, Office of Research and Evaluation, Division of Teacher Education, June 1960. (Mimeographed.)

Milton J. Gold. "Schedules for Observation of Student-Teaching Performance Used in Hunter College Teacher Education-Television Research." New York: Hunter College of the City University of New York, March 1, 1962. (Dittoed.)

Milton J. Gold. "TV Kinescopes in Student Teaching." (Xerox copy.)

Robert Goldhammer. Address to the Advisory Committee for the Graduate Teaching Internships. Pittsburgh: University of Pittsburgh School of Education, no date given. (Typewritten.)

Robert Goldhammer. "Clinical Supervision and Psychotherapy." Pittsburgh: University of Pittsburgh, July 1964. Lecture. (Mimeographed.)

Robert Goldhammer. "Observations on Observation and Observations on Observations on Observation." Prepared for college course, January 5, 1964. (Mimeographed.)

Robert Goldhammer. "Process Goals in Supervision." Pittsburgh: University of Pittsburgh, July 1964. Lecture. (Mimeographed.)

Ben Harris. *Supervisory Behavior in Education*. New York: Prentice-Hall, Inc., 1963.

Marie M. Hughes. "Teaching Is Interaction." *Elementary School Journal.* Vol. LVIII, No. 8; May 1958.

Marie M. Hughes. "What Is Teaching? One Viewpoint." *Educational* Leadership 19(4): 251-59; January 1962.

Marie M. Hughes *et al. The Assessment of the Quality of Teaching: A Research Report*. Salt Lake City: University of Utah, 1959. U.S. Office of Education Cooperative Research Project No. 353.

R. deV. Jones. "The Prediction of Teaching Efficiency from Objective Measures." *Journal of Experimental Education* 15: 85-99; 1946.

Journal of Teacher Education. Vol. 14, No. 3; September 1963.

L. J. Lins. "The Prediction of Teaching Efficiency." *Journal of Experimental Education* 15: 2-60; 1946.

William H. Lucio. "Instructional Improvement: Considerations for Supervision." *Educational Leadership* 20 (3): 211-17; December 1962.

William H. Lucio and John D. McNeil. *Supervision: A Synthesis of Thought and Action.* New York: McGraw-Hill Book Company, Inc., 1962.

Donald M. Medley and Harold E. Mitzel. "Some Behavioral Correlates of Teacher Effectiveness." *Journal of Educational Psychology* 50: 239-46; December 1959.

Donald M. Medley and Harold E. Mitzel. "A Technique for Measuring Classroom Behavior." *Journal of Educational Psychology* 49: 86-92; April 1958.

Donald M. Medley. "The Development of Classroom Behavior Dimensions for Student Teachers and Pupils." Speech, American Association for the Advancement of Science, Philadelphia, December 30, 1962. (Mimeographed.)

Donald M. Medley. "Experiences with the OScAR Technique." *Journal of Teacher Education* 14(3): 267-73; September 1963.

Donald M. Medley. "Measuring Changes in Student Teacher Behavior: A Second Look." Speech, Association for Student Teaching, Chicago, February 20, 1964. (Mimeographed.)

Alice Miel, editor. *Creativity in Teaching: Invitations and Instances.* Belmont, California: Wadsworth Publishing Co., 1961.

John Clifton Moffitt. *In-service Education for Teachers.* Washington, D. C.: The Center for Applied Research in Education, Inc., 1963.

James Olivero. "Video Recordings as a Substitute for Live Observations in Teacher Training." Doctoral Dissertation. Stanford, California: School of Education, Stanford University. Date unknown.

Paul Pfuetze. *Self, Society, and Existence: Human Nature and Dialogue in the Thought of George Herbert Mead and Martin Buber.* New York: Harper Torchbooks, 1954.

Marilyn Raack. *Summary of Studies of Teacher Behavior Based Upon Direct Observation.* Program on the Education of Teachers, University of California, Los Angeles, May 1963. (Mimeographed.)

William Rabinowitz and R. M. W. Travers. "Problems of Defining and Assessing Teacher Effectiveness." *Educational Theory* 3: 212-19; 1953.

H. H. Remmers, chairman. "Report of the Committee on the Criteria of Teacher Effectiveness." *Review of Educational Research* 22: 238-63; 1952.

H. H. Remmers. "Second Report of the Committee on the Criteria of Teacher Effectiveness." *Journal of Educational Research* 46: 641-58; May 1953.

David G. Ryans. *Characteristics of Teachers: Their Description, Comparison, and Appraisal.* Washington, D.C.: American Council on Education, 1960.

Herbert Schueler and Milton J. Gold. "Video Recordings of Student Teachers—a Report of the Hunter College Research Project Evaluating the Use of Kinescopes in Preparing Student Teachers." *Journal of Teacher Education* 15(4): 358-64; December 1964.

Herbert Schueler, Milton J. Gold and Harold E. Mitzel. *The Use of Television for Improving Teacher Training and for Improving Measures of Student-Teaching Performance, Phase I: Improvement of Student Teaching.* New York: Hunter College, The City University of New York, 1962.

B. Othanel Smith. "A Concept of Teaching." *Teachers College Record* 61(5): 229-41; February 1960.

B. Othanel Smith and Robert H. Ennis, editors. *Language and Concepts in Education.* Chicago: Rand McNally and Company, 1961.

B. Othanel Smith and Milton O. Meux. *A Study of the Logic of Teaching.* Urbana: University of Illinois. U.S. Office of Education Cooperative Research Project No. 258 (7257). No date given.

Richard L. Turner. *Problem Solving Proficiency Among Elementary School Teachers.* U.S. Office of Education Cooperative Research Project, No. 1262, 1964. (Mimeographed.)

R. L. Turner and N. A. Fattu. *Problem Solving Proficiency Among Elementary School Teachers I. The Development of Criteria.* Monograph of the Institute of Educational Research. Bloomington: Indiana University, May 1960.

R. L. Turner and N. A. Fattu. *Skill in Teaching, A Reappraisal of the Concepts and Strategies in Teacher Effectiveness Research.* Bloomington: Indiana University, 1960.

John Withall. "The Development of a Climate Index." *Journal of Educational Research* 45: 93-99; 1951.

John Withall. "The Development of a Technique for the Measurement of Social-Emotional Climate in Classrooms." *Journal of Experimental Education* 17: 347-61; March 1949.

Asahel D. Woodruff. *Basic Concepts of Teaching.* San Francisco: Chandler Publishing Company, 1961.

ASCD Publications

YEARBOOKS

Balance in the Curriculum Raises questions and issues affecting balance in instruction	$4.00
Evaluation as Feedback and Guide Advocates replacing grades, marks, tests and credits with a simpler and more basic evaluation which is illustrated	6.50
Fostering Mental Health in Our Schools Relates mental health to the growth and development of children and youth in school	3.00
Guidance in the Curriculum Treats that part of guidance which can and should be done by teachers	3.75
Individualizing Instruction Seeks to identify and enhance human potential	4.00
Leadership for Improving Instruction Illustrates leadership role of persons responsible for improving instruction	3.75
Learning and Mental Health in the School Examines school's role in enhancing competence and self-actualization of pupils	5.00
Learning and the Teacher Analyzes classroom practices, seeking to derive ideas and concepts about learning	3.75
Look at Continuity in the School Program, A Studies articulation problems, kindergarten through high school	4.00
New Insights and the Curriculum Projects and examines new ideas in seven frontier areas	5.00
Perceiving, Behaving, Becoming: A New Focus for Education Applies new psychological insights in education	4.50
Research for Curriculum Improvement Helps teachers and others carry on successful research in school or classroom	4.00
Role of Supervisor and Curriculum Director	4.50
What Shall the High Schools Teach? Raises questions related to content of the instructional program in secondary schools	3.75

PAMPHLETS

Assessing and Using Curriculum Content	$1.00
Better Than Rating	1.25
Changing Curriculum Content	1.00
Children's Social Learning	1.75
Changing Curriculum: Mathematics, The	2.00
Changing Curriculum: Science, The	1.50
Curriculum Change: Direction and Process	2.00
Curriculum Materials 1967	2.00
Discipline for Today's Children and Youth	1.00
Elementary School Science: A Guide to Current Research	2.25
Elementary School We Need, The	1.25
Extending the School Year	1.25
Foreign Language Teaching in Elementary Schools	1.00
Freeing Capacity To Learn	1.00
High School We Need, The	.50
Human Variability and Learning	1.50
Humanities and the Curriculum, The	2.00
Humanizing Education: The Person in the Process	2.25
Improving Language Arts Instruction Through Research	2.75

Intellectual Development: Another Look	$1.75
Junior High School We Need, The	1.00
Junior High School We Saw, The	1.50
Juvenile Delinquency	1.00
Language and Meaning	2.75
Learning More About Learning	1.00
Linguistics and the Classroom Teacher	2.75
Matter of Fences, A	1.00
New Curriculum Developments	1.75
New Dimensions in Learning	1.50
Nurturing Individual Potential	1.50
Personalized Supervision	1.75
Self-Contained Classroom, The	1.25
Strategy for Curriculum Change	1.25
Supervision in Action	1.25
Supervisor: Agent for Change in Teaching, The	3.25
Teaching Music in the Elementary School: Opinion and Comment	1.25
Theories of Instruction	2.00
Three R's in the Elementary School	1.50
What Are the Sources of the Curriculum?	1.50
What Does Research Say About Arithmetic?	1.00
Child Growth Chart	.25

Discounts on quantity orders of same title to single address: 2-9 copies, 10%; 10 or more copies, 20%. Orders for $2 or less must be accompanied by remittance. Postage and handling will be charged on all orders not accompanied by payment.

ASCD membership dues, including Yearbook and subscription to EDUCATIONAL LEADERSHIP, official journal of the Association—$10.00. Subscription only—$5.50 (included in both regular and comprehensive membership dues). Comprehensive membership (includes all ASCD publications issued during the 12-month membership period)—$15.00.

Order from:

Association for Supervision and Curriculum Development, NEA
1201 Sixteenth Street, N.W., Washington, D.C. 20036